Higher Education Development - 10th Five Year Plan Proposal

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Ministry of Human Resource Development
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Foreword

The end of the 9th Plan period and the beginning of the 10th Plan period is inevitably a time for stock taking. The first thing that comes to one's attention is that India's enrolment or participation rate in higher education is still well below that in the better known developing countries and far below that in the developed countries. Current estimates are that about 6-7 percent of the relevant age group (18-23) are enrolled in higher education and that for India to play its rightful role as a lead player in the knowledge century, this percentage has to increase to about 15% in the next decade. The immediate aim would be to take it to 10% during the Xth Plan period (2002-2007) and use both the conventional and openlearning systems to reach this goal. Use of information and communication technology and maximum use of existing infrastructure would help in building up a more inclusive higher education scenario. Access is not merely a numbers game. It has to be seen that these socialy or economically disadvantaged get their fair share of the higher education pic.

Quality issues are central to higher education and this has become all the more so in the context of globalization. Reaching a certain threshold in terms of output quality in institutions which would be comparable within and without national boundaries is now a non-negotiable proposition. There has to be thus a continuous process of self and peer review of institutional standards measured against national and increasingly international standards, external accreditation et al. The other factors that would go with this would be establishing a climate of decentralization where autonomy would thrive and innovation flourish in tertiary institutions. In practical terms this would translate into more colleges becoming autonomous and all higher education institutions getting themselves assessed and

accredited. At the higher end of the spectrum there would be Departments and Universities of Excellence competing with the best of other lands.

Relevance is another key area of concern in the imparting of higher education as rates of obsolescence accelerate in a fast changing economy and future trends become difficult to predict (IT is an exemplar). A greater emphasis on generic studies, acquisition of hands-on experience and marketable skills, dual degrees, courses with an applied content are the various interventions that come to mind. A constant dialogue with user organizations would be a key component.

The massification of higher education demands a dramatically increased flow of funds into the sector. To an extent this is being done through public support to higher education but to give an added boost there has to be greater internal generation of resources. 25% of recurring expenditure should come from the internal sources to give higher educational institutions greater financial resiliency. Increasing fees, consultancy arrangements, alumni fund raising campaigns, recovering hostel and mess expenditure on actual cost basis etc are some of the interventions possible.

To maximize returns from the higher education system use of ICT Technology for networking and connectivity purposes would be a must. This needs no reiteration. One of the more significant aspects of the Xth Plan is the proposed intervention of improving colleges by providing them with better infrastructure and better teaching support. There has been a neglect of colleges hitherto which does not stand to reason seeing that 86% of higher education takes place in them. The aim would be to get over the system of affiliated colleges

in the ultimate analysis and go in for autonomous institutions with their own curriculum and syllabi pedagogy, etc. Higher quality in undergraduate education would be the end result.

Higher education systemic changes would necessarily have to be achieved in tandem with the private sector. R&D would be an important area for such partnership along with manpower projection requirements, training, framing of curricula, etc. The deemed university route would permit private sector participation in newly emerging areas and in the provision of quality education.

There has been an elaborate process of consultation in framing the Xth Plan. The Planning Commission which set up the Working Group had included a panel of eminent educationists who later subdivided themselves into Sub-Groups for addressing different aspects of higher education interventions to be focussed on. Education Secretaries of States were included in both the Working Group and then the Sub-Groups. Later the National Institute of Educational Planning and Administration organized a National Seminar to address current and future issues on higher education in the Xth Plan. including matters such as WTO and TRIPS. The UGC and IGNOU had also set up their own consultations. Ultimately a Drafting Committee consisting of Vice-Chairman UGC, the Vice-Chancellors of Jamia Millia and IGNOU, the Secretary General of AIU and a Senior Fellow of NIEPA prepared the final document.

A collective effort in realising the goals of the Xth Plan as set out in the Plan document is a must.

Sd-/

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I

THE PREMISES

Among the factors critical to the development of mankind have been education of ıe people, generation and application of knowledge in different walks of life for ırposes of social cohesion, political management and economic development. Countries hich have been able to provide education to a high proportion of their population and ngaged in higher education and research have been in the forefront of development. hose countries, which could not keep the pace of development of education among their eople and could not adequately invest on higher education and research, have lagged ehind. In the 21st century, the place of education more particularly higher education nd research, has become more important as knowledge is now occupying center stage in ne development of mankind. The present century is now transforming human society nto a knowledge society where physical capital is being supplanted by human capital ith knowledge. The challenges before developing countries are relatively more than eveloped countries in this process as the human capital base needs to be developed from ower starting levels.

he World View on Higher Education

A recent report of task force on development of higher education in developing untries has formulated the view as follows :

> *"As knowledge becomes more important so does higher education. Countries need to educate more of their young people to a higher standard – a degree is now a basic qualification for many skilled jobs. The quality of knowledge generated within higher education institutions, and its accessibility to the wider economy, is becoming increasingly critical to national competitiveness.*

Therefore, the world over, higher education is passing through an important ase. It is changing radically, by becoming organically flexible in its diversity of

programmes, in its structure, in its curricula, in its delivery systems and it is adapting itself to an ever wider use of information and communication technologies. Nations are struggling to meet diametrically opposite demands of education with quality and enhancement in number of students who desire to go for higher education. Quality and quantity, both, ask for better academic and physical infrastructure and greater financial resources. Both, basic education which lays foundation for a healthy, skilled and agile intellectual human force and lifelong education beyond the basics which enables countries to continually assess, adapt and apply new knowledge, have their own importance in knowledge-linked society. The convergence of communication and computer technologies has opened new avenues for the spread and quality of education. It also has strength to give cost-effective solution for the ever-expanding demand for higher education. Indeed, this new revolution greatly facilitates the acquisition and absorption of knowledge, offering to a country like India unprecedented opportunities to educational systems.

II

STATUS OF DEVELOPMENT OF HIGHER EDUCATION

Status of Development

The modern higher education system in India is almost one hundred and thirty five year old. However its growth has been much faster after India became independent. A good base of 234 university institutions and 11 thousand colleges fairly spread throughout the country enrolling 7.5 million students and 3.4 hundred thousand of teachers with fairly good amount of diversification has been developed (see Table 1). Yet the size of system falls much short of the required strength. Its quality leaves much to be desired. The contribution though has been significant, yet looking to the vast and changing needs of the country the coverage has not been sufficient. Significant progress has been made in research, yet there are areas, which need considerable attention and support. Here also a good base in terms of natural science and social sciences, arts and culture research has been developed, yet a great leap is needed to reap the benefit of research for the development of the country.

Table 1 : Growth in Higher Education in India

Institutions	1950-51	1990-91	1996-97	1998-99
Universities*	30	177	214	238
Colleges	750	7346	9703	11089
Enrollment (000s)	263	4925	6755	7417
Teachers (000s)	24.0	272.7	321.0	342.0

Note : * Includes institutions deemed to be universities, but excludes other institutions.

Source : UGC Annual Report 1996-97 & 1998-99, (New Delhi, University Grants Commission) and Selected Educational Statistics (New Delhi, Ministry of Human Resources Development (relevant years).

The proportion of educated people to the proportion of relevant age group enrolled for higher education and investment on higher education and R & D compares

adversely with either the fast developing countries or with the developed countries. These also fall short of requirement of the vast population and development needs of India.

Of the relevant Age Group Population only 6 per cent are enrolled for Higher Education as compared with the relevant age group in higher education which is 80% for U.S.A., 50% for U.K. and 25-31 per cent for European and fast developing countries (see Table 2). Of those enrolled in higher education most have concentrated on certain fields of studies, namely Arts, Commerce and Science and do not get diversified education. The attempt to vocationalise undergraduate programme has partly succeeded, yet a large number still pursue traditional programmes of studies. This has serious implications on development of human capabilities to face the challenges of the future.

Table 2 : Participation in Tertiary Education Enrolment (%) of the Relevant Age-Group

Countries	1980	1997
U.K.	19	52
U.S.A.	56	81
Germany	27	47
Italy	27	47
Japan	31	43
China	2	6
India	5	7*
Indonesia	4	11
Korea (Rep.)	15	68
South Africa	5	15

Source: World Bank, Human Development Report, 2000.

During the mid 60s and 70s the growth of higher education, was 12-13 percent. Subsequently, it declined to 4-5% in the mid 80s and it continues to remain at the same rate (see Graph 1). This decline is partly due to the policy of restriction of enrolment in higher education and decline in plan allocation of funds as a percentage of the total

Population age group denominator is 20-24 years which is smaller than actual for India i.e. 17-23 years. As students become eligible for passing higher secondary by 16 years. In 17th year, they are in the colleges. The figure is, therefore, higher than our estimates in Table-1.

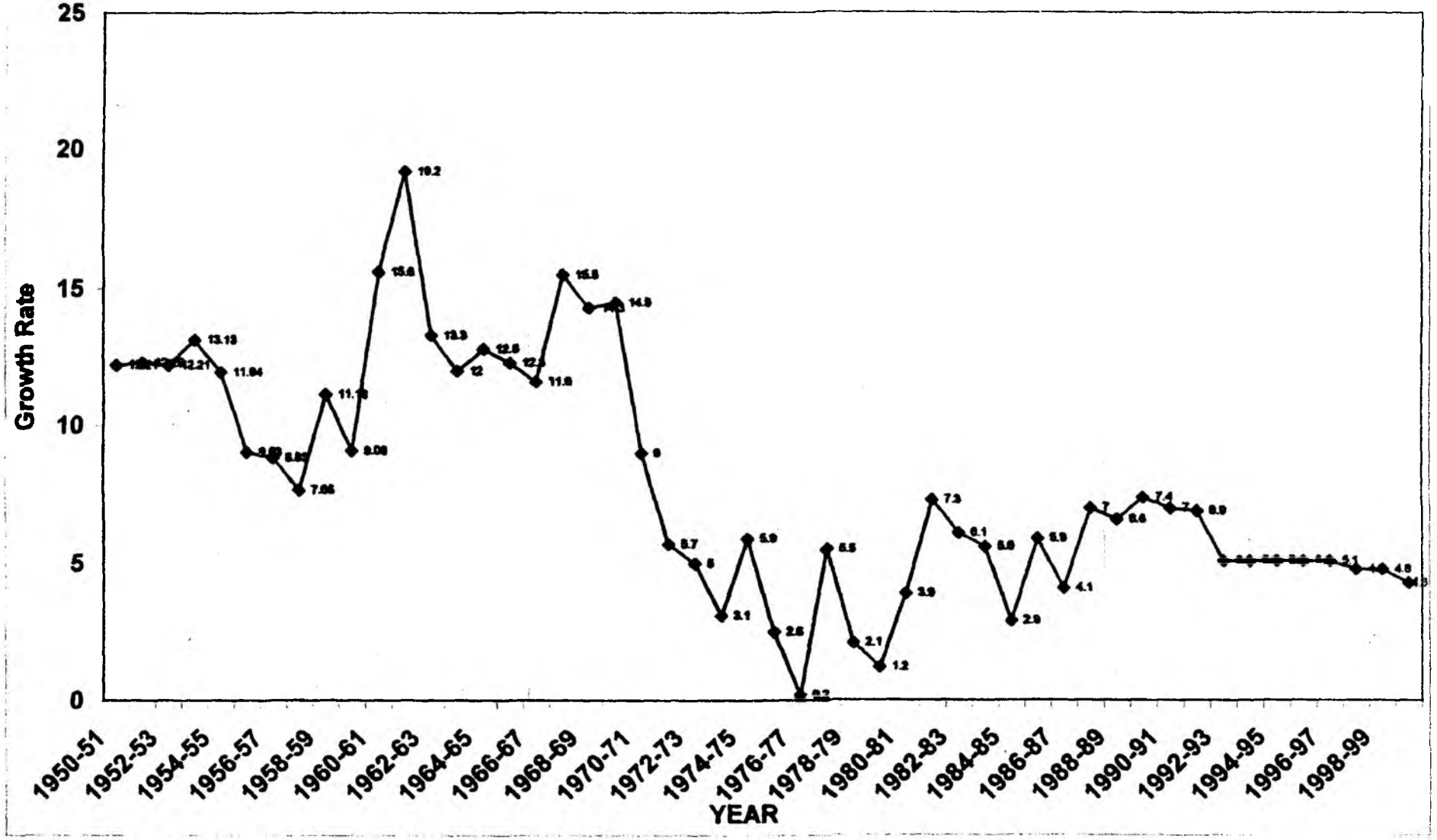
education plan budget (Central) from 25 to 16 % and finally to 8% in subsequent plans (see Graph 2).

This has not only restricted the enrolment but also compelled the system to follow cheaper options in the development of Higher Education and avoid diversification, which would have needed greater resources. As a result of these policies, India has been deprived of giving greater opportunities to its youth and provided less expensive Arts, Commerce and Science education without much diversification. Ultimately, it resulted in a good part of them lacking in practical know-how and skills in various fields of knowledge application.

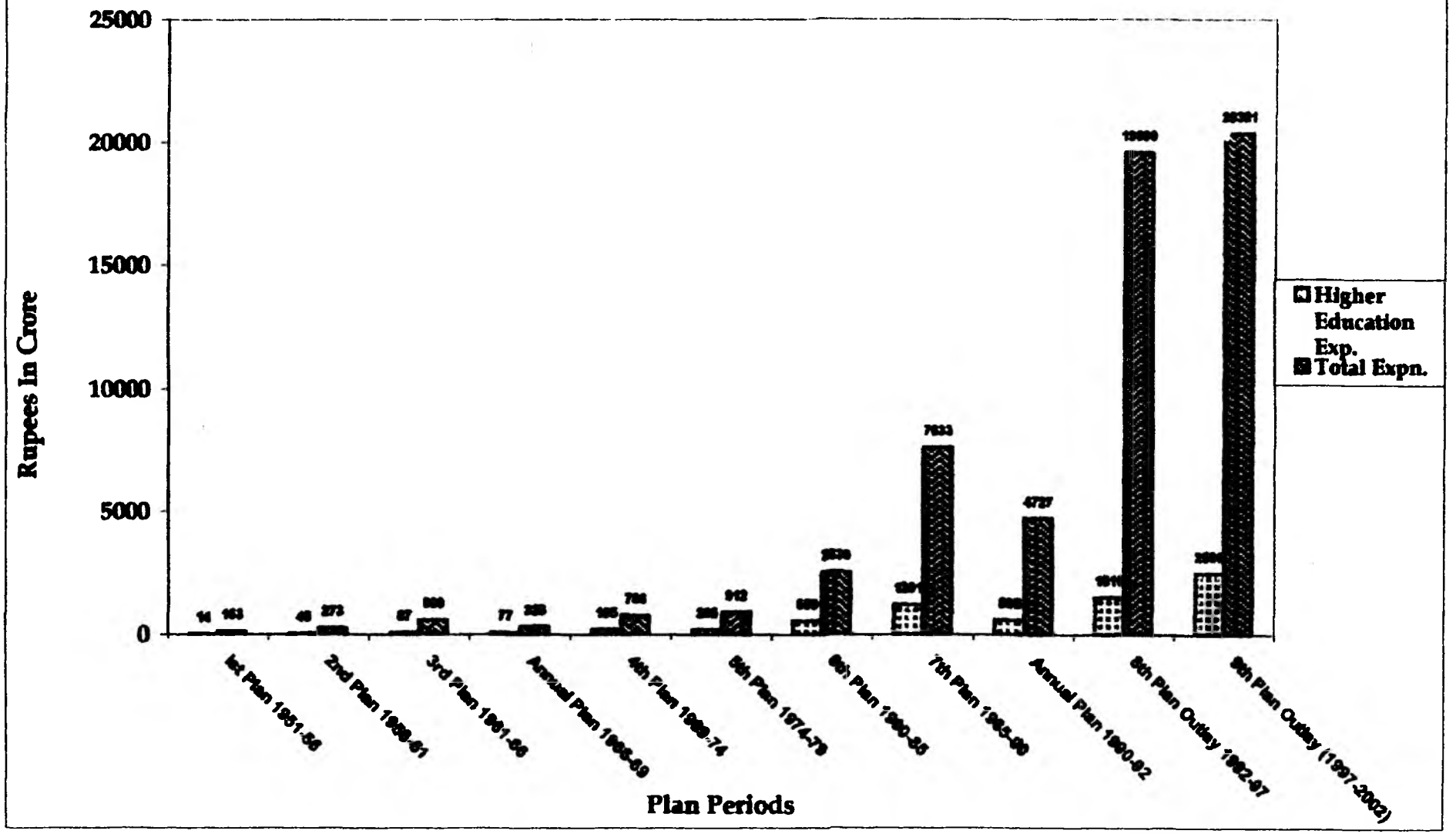
Problems and Issues

The problems of Indian higher education system are of access, equity, number, relevance, quality, and resource crunch. The public universities are facing several severe constraints and many of these constraints are manmade. They emerged because of extreme unwillingness of all the players in higher education to change with time and adopt new ways and methods to address various issues that emerged over time. The system has got itself so entangled in its own deeds that there does not seem to be any magic solution for getting out of this scenario. But this cannot be the reason for not addressing the issues calmly and trying to find solutions that in the long term would be of benefit. The urgency to go in this way is more because of the growing interdependence of society and nations at a global level in today's interlinked world. Globalization is having its impact on education also and this is happening more immediately because of shrinking space, shrinking time and disappearing borders as a result of the information and communication revolution. Educating the youth will continue to remain the main responsibility of public universities, though it may not necessarily be their sole responsibility. Alternatives, through private institutions and spreading teaching activities by foreign universities, are emerging in India.

Annual Enrolment in Higher Education in (%)



PLAN EXPENDITURE/OUTLAY ON HIGHER EDUCATION VIS A VIS TOTAL EXPENDITURE ON EDUCATION FROM FIRST PLAN TO NINTH PLAN



This is likely to give an advantage to a few people, people who have an lightened family background, strong academic commitment and better resources for eting the financial demands of such education. However because of this, poor people d disadvantaged communities risk being pushed to the margin in the present day mpetitive regime. One could raise a question what is the reason for this sudden interest private institutions and for that matter of foreign universities in participating in the ɔcess of Indian higher education. The reason is simple. In recent years Indian ıduates have done well in the knowledge industry and they are now in an advantageous sition in the knowledge-controlled world economy. The interest in technical and ɔfessional education, particularly in disciplines and subjects that have link with owledge industry, has increased. The Indian youth are now looking for education that ıuld be of quality and immediate utility. Private institutions have come up to fulfill the mand by introducing a large number of specific skill oriented course. The foreign ıversities are also looking forward to encash on such demands. The Indian economy ɔo has shown steady growth in recent years. This has enhanced the percentage of nilies who can afford to spend more money on education. Even though the percentage such families may be small, it is the absolute number that matters and it is large. ence, many families can afford to avail of education being provided in private or reign universities by paying large fees. Thus rising interest in utility oriented education d enhanced economic strength of the few have encouraged the growth of private stitutions and the entry of foreign universities in India.

Large number of families now want their children to have advantages of this enario but are not in a position to afford the high cost of education. They would ntinue to depend upon the public education system. Interestingly enough, it is the ıblic education system that has given the presently earned skilled human power vantage to India.

We are thus facing a very challenging situation. The key elements, that are the tegral part of such a situation, could be summarized as follows:

- Our best-trained youth, in all disciplines and all subject areas, can become an integral part of global social and economic revolution, particularly through expertise in creating and handling of "knowledge", that offer great potential

for human advance and for enriching the quality of human life. They will thus bring knowledge and wealth to the nation. The linking to world economy with that of ours will create a more favorable employment environment.

- The growing Indian economy and the nation, which is reinventing itself to face the challenge of globalization, also needs highly skilled human power to manage its own affairs. This demands that our education system must address the question of quality and of producing value added trained human power, in all disciplines and all subjects, that would sustain and enhance our advantage as a nation contributing to the "*Gray Revolution*".

- But at the same time, we need to create more and more opportunities for better education for large number of students who want to be a part of new economic revolution. This means we need to create possibility of educating all those who desire to get higher education and increasing the number of higher education institutions is not the answer to this. The wise approach would be to improvise the existing ones for innovative academic and operative governance so as to reduce the marginalisation of the poor. The use of advanced new Information and Communication Technologies (ICT), for creating virtual academic structure to improve quality in teaching and research as well as to improve academic support elements, is going to be the right approach.

- The strengthening of research in universities continues to be of importance. The growing interconnectedness of all the sciences (pure, social and human) is one of the principal thrusts of our times. We need to support the basic as well as utility oriented disciplinary and interdisciplinary research. It is also necessary to recognize that sustained support is needed to develop excellence and there is need to support good balance between basic and applied research portfolios.

- The third dimension of university activities namely extension that presently includes adult and continuing education as an important element, needs to be further widened by reorienting it as link with business and society. Indeed, in the economy charged environment outreach activities in lifelong education in aspects related to skills, health, environment, physical fitness, values, good citizenship, and such other aspects which lead to good life, attain special importance. In addition, supporting disadvantaged groups (SC/ST, minority, women, physically handicapped) is a task in itself.

III

THRUST AREAS OF HIGHER EDUCATION DEVELOPMENT – 5TH – 9TH PLANS

Some of the Challenges of Development are being met through planned efforts over the last nine Plan since 1951. Analysis of the past five year plans indicates that, there have been continuous efforts to strengthen the base by developing infrastructure, improving the quality through several programmes and schemes, introducing reforms in content and evaluation and encouraging generation of knowledge through research.

A comparative chart indicating policy thrust during different five-years plans is given in Chart 1. There has been a shift in the thrust areas of higher education from the 6th five-year plan onward. While the focus of the 5th five-year plan was on the development of physical facilities and infrastructure, the 6th plan onward the focus shifted to consolidation and quality improvement.

The 7th plan sought to further strengthen the direction provided during the 6th five year plans by laying emphasis on research and academic development. It was from this plan onward, the centers of excellence and area study programs got special attention. Emphasis on restructuring of courses so as to make them more relevant to the national needs was yet another salient feature of this plan. Optimum utilization of existing resources and facilities was also given emphasis in this plan. Until the 7th plan, the focus of funding was on the identified areas of disciplines and programs.

It was from the 8th plan onward, that the need for differential funding was recognized. Under this plan it was envisaged that the developing departments would be provided necessary funds to bring up their facilities and activities to an optimum level essential for their teaching and general research work and for maintenance of adequate standards, while the departments, which have already reached the stage of development and therefore have the potential to become fully developed over next five years, would be provided critical inputs and academic guidance. In the case of well-developed

departments, general plan assistance was to be provided mainly to make good their deficiencies for teaching programs. It was during this plan that it was emphasized that while existing postgraduate departments of developing universities would be provided financial assistance to strengthen their academic facilities, the developed universities would be given funds for specialized courses with inter-disciplinary focus.

The 9th plan stands apart from its predecessors and deserves a special mention. The key areas of emphasis of this plan are presented in Chart-2. This plan aimed at gearing the system of higher education to meet the challenges arising out of the major social, economic and technological changes. The plan envisaged that the system of higher education has to prepare its graduates for participation in the social and economic development of the country and the type of cultural environment and ethos it will need to foster.

It was realized in this plan that the information technology revolution will have major impact on the structure, management and mode of delivery of educational system and to meet these challenges, a departure will have to be made from the traditional thrusts of incremental additions to the existing programs so as to put a clearer focus on national development priorities. Amongst other things the 9th plan also focused on more efficient utilization of resources.

Chart-1 : Thrust Areas of Different Five Year Plans

Plans	Thrust Areas
Fifth	Construction of academic buildings, library, staff quarters, teachers' hostel, students' hostel, study homes, non-resident students' center; Purchase of books, journals, equipment; Appointment of additional teaching staff, technical supporting staff etc; Miscellaneous schemes
Sixth	Improvement of standards; Regulation of Admission; Restructuring of courses for practical orientation and greater relevance; Centralization of instrumentation and repair facilities; Make extension as an integral part of education; *Low priority was given to expansion of educational facilities by way of new universities, centers for postgraduate studies, new department and to construction/extension of buildings involving brick and mortar.*
Seventh	Creation of research and other centralized facilities at selected centers for the benefit of a group of institutions in the region/country; Encouragement of academic mobility and cross-fertilization of ideas with a view to inculcating the feeling of national integration by providing special assistance for faculty housing/complex and hostels; Restructuring courses at first degree level so that they become relevant to the local needs and environment and increase the area of employability of graduates; Give priority to programs intended to achieve the national objectives; Development of center of excellence; Make optimum use of the existing facilities in the universities/ colleges specially physical facilities;
Eight	Strengthening of existing postgraduate departments in terms of laboratories, workshops and library services; In case of developed universities, New specialized courses and departments with an inter-disciplinary approach provided they could be sustained by existing facilities; In case of developing universities, new departments and courses only if the need is justified; Viability of courses, departments etc. so that those courses that have lost their relevance or are outdated could be dispensed with and teachers in such subjects could be retrained.

Source: Collated and compiled from plan guidelines and Annual Reports of the UGC for relevant years.

Chart-2 : Thrust Areas of the Ninth Five Year Plan

Relevance and Quality of Education :

- Career development by encouraging such courses with professional focus;
- Modification in traditional courses to make them application orientated;
- Encouragement to universities to develop basic theoretical understanding of discipline but they will have to ensure that the theory and practice is blended and integrated;
- Focus on hands on experience; and
- The public concerns as reflected by students, parents, community and government about downslide in the quality of education will have to be addressed by focusing on the quality of education rather than on quantitative expansion.

Access and Equity :

- Paying special attention to institutions of higher education in backward areas, hill areas and border areas in order to remove regional imbalances;
- Addressing the higher education needs of such social groups as those under-represented and not yet fully in the mainstream of university education; These will include the SC/ST, women, handicapped and minorities; and
- The focus will not be only on quantitative expansion but on qualitative development of institutions of higher education in the above areas and catering to above groups.

University and Social Change :

- Universities will be encouraged to develop a greater emphasis on non-degree programs in order to meet expectations arising out of changes that are taking place in the society;
- While the departments of adult and continuing education would be the focal point for social change function, these activities will be made the responsibility of every department; and
- Major thrust will be given to program development for women studies and center for women studies shall be essentially inter-disciplinary.

Management of Education :

- Support for streamlining the university management system;
- Assistance will be provided for;
- Academic, administrative and financial decentralization;
- Autonomy of the Department;
- Autonomy of the affiliated colleges & institutions;
- Developing in-house training facilities for non-teaching staff, rationalization of posts;
- Increasing use of information technology in management; and
- Establishment of College development Council, workshops for college principals, and improvement in backward and forward linkages.

Resource Mobilization :

- Focus on planning for internal and external resource mobilization;
- Differential fee structure;
- Enhancement in fees for foreign students; and
- Generation of revenue through increased university-industry linkages.

Source: Collated and compiled from plan guidelines and Annual Reports of the UGC for various years.

IV

THE PARADIGM SHIFT IN DEVELOPMENT & FUTURE AGENDA

When we are planning for 10th Five Year Plan we may to take into consideration these past development and the shift in paradigm of development and longer vision for the developments of higher education. The same are being discussed here.

The Paradigm Shift

There has been a shift in paradigm of development in the beginning of the century. Not only knowledge is supplanting the physical capital but two major revolutions, namely, advent of information and communication technology and opening of world economy (within it arrangements of international trade in services) have completely transformed process of development and competition in trade in domestic economy and international economy. This change has placed more emphasis on quality of human resources and development of R & D. The standards of quality are not only national but increasingly becoming international.

Keeping this in view it is pertinent to draw the agenda for future :

The Agenda for the 21st Century

The scope and demand for higher education is increasing and the new paradigm, in higher education, involves creation of intellects (and that means promotion of global standards in institutions of higher education) of world standards and also training of skilled human power at a mass level without compromising on quality (and the man making quality as an integral part of working of institutions of higher education).

This suggests the need for a forward-looking strategy for generation of human resources, which safeguards our interests at global level and also satisfies our internal need for skilled human power. Emerging national needs require Indian higher education

to organize itself to educate students for competence and skills to succeed in an interdependent world.

If this national agenda for change is to develop, every institution of higher in India must commit itself to providing all of its students with in-depth knowledge and understanding in their chosen field of studies. This has to be done at a globally acceptable level while keeping the ground realities of access and equity in focus.

In India broadening access of higher education is an on-going process and shall continue to be so. It is particularly important to help the disadvantaged groups – whether because of caste, or creed, or gender – to overcome the endemic problems that exclude them from the system. We will have to make proactive efforts to attract young members from disadvantaged groups in the main stream of higher education by devising well-designed and consistent remedial support both at academic and financial level. This will take care of equity also, but it has potential for excellence as well – because we will be drawing student's intake from an ever-widening demand, at all strata of society, for higher education.

The following ground rules for achieving this agenda define the task ahead :

- Create possibility of enhancing the quality of teaching and learning experience through use of information-pathway.
- Create more open and flexible education structure with "cafeteria approach".
- Revamp curricula to reflect the need for national development with international benchmarking.
- Encourage innovations in laboratory teaching.
- Harness the creativity of teachers, research fellows, students and external experts to develop multi-media teaching material.
- Establish electronic communication network for sharing of academic resources.
- Harness ICT for enhancing the quality of teaching and research.
- Invest in undergraduate education through enhancement of appropriate facilities.

- Identify and support few universities and colleges that have potentials to do better both in undergraduate and postgraduate education.

- Create framework for combining the strengths of scientific laboratories, private initiatives and universities to start Advance Institutions for Under-graduate and Post-graduate education.

- Increase understanding for social change and enhance perception for human values through outreach activities.

- Reinforce Universities' role of service to society through interdisciplinary and trans disciplinary approach.

- Support sports and personality development activities..

- Focus on faculty development and rewards.

- Inculcate appreciation for internal academic audit and external peer review.

- Enhance research capabilities by upgrading scientific infrastructure in universities and Inter-university Centres and give easy access to research funding.

- Invest in basic and utility-oriented research and promote interdisciplinary research in all the subjects and all the disciplines.

- Encourage twinning with R & D institutions and industries for symbiotic R & D programs.

- Create opportunities for faculty for spending more time on research through "joint-employment" opportunities in R & D institutions and industries.

- Promote cross flow of teachers/scientists through interchange between universities and diverse research laboratories at national/international level.

- Promote "Quality" consciousness and monitor performance of educational institutions.

- Create an enabling organizational and administrative structure for making it more user friendly.

- Expand links with international educational and research institutions for enriching the students and faculty.

- Expand study abroad opportunities for foreign students.
- Focus on exporting of Higher Education.
- Create independent financial support structure for venture capital for academic initiatives and student education loans.
- Carefully examine and create ways to change tuition and other fees structure that will, without burdening the students from poorer social and economic – backgrounds, sustain the system.
- Devise a mechanism for proactive efforts to attract students from disadvantaged group in the main stream of higher education.
- Enhance opportunities for mobilizing and optimising financial resource base.
- Develop opportunities for enhanced financial support for innovative and creative institutions.

10th Five Year Plan Development Thrusts

In our complex and rapidly changing Indian society, higher education must contribute to the initiation and strengthening of process of development with equity, justice, solidarity and liberty as key elements. To attain this objective, the time proven core mission of higher education – to educate, to train, to undertake research and to provide service to the community – must be preserved, reinforced and further expanded. This requires that higher education enjoy autonomy and freedom exercised with responsibility. The healthy growth of any nation requires educated citizens with skills and expertise in all disciplines and in all subjects both at basic and professional level with equal emphasis and importance.

The 10th Five Year Plan would accordingly have the following general and ecific objectives :

General

- To achieve a profound transformation of higher education in order that it becomes an effective promoter of sustainable human development and, at the same time, improves its relevance with closer links with the world of work and achieve quality in its teaching, research and business and community extension functions including life long learning.

Specific

- To contribute to the transformation to improvement of the conceptions, methodology and practices related to :
    - The relevance of higher education.
    - Quality, evaluation and accreditation.
    - Research and development.
    - Outreach activities in business and community and life long learning.
    - The knowledge and use of the new information and communication technology.
    - Management and financing.
    - Export of higher education, and reorientation of international cooperation.
    - Strengthening of open and distance education system.
    - Strengthening of research institutions.
    - Mobilization of resources.

V

APPROACHES, STRATEGIES AND RESPONSE

Growth and Development of Higher Education

Considering the critical role of higher education in the socio-economic development a minimum of 15% of the relevant age group (17-23 years) needs to be enrolled in the higher education. This would mean the doubling of the present number of students in Higher Education. Even after this increase a large number of youth would be left out of higher education. The target of 15% of relevant age group may be attained in 10th and 11th plans put together. For 10th plan the target could be 10 per cent of the relevant age group. Considering the likely increase in the enrollment, strategies have to be carefully designed. Some of them are highlighted here.

To meet the growing demand for higher education, there is need for expanding higher education. The focus should be :

- Increase in number of institutions.
- Increase in intake capacity.
- Convergence of formal, non-formal, distance and IT education institution.

The strategies could be :

- Revamping the existing infrastructure.
- Adoption and convergence of both traditional, non-traditional modes and the extension activities.
- Vocational education programmes and community colleges offering range of vocational courses and life-oriented skills are needed immediately. This would also draw the left out youth into the mainstream.

- Vocational education would include dropout, older people, working women, disabled and other deprived sections of society.

- All regions should endeavor to reach the target of 15%. This would require special efforts. Meaning there by the programmes and strategies will have to be adopted to reach out to areas (rural, hills and inaccessible regions) and groups which have already been identified. One can very well take the example of 330 blocks having minority concentration, and 160 districts with low level of literacy. It is also recommended that the focus should be on 'population groups', such as tribal groups and so on.

- The center must allocate fund specially to the states to achieve the imminent expansion. The fund specified for this expansion should not be used for any other purpose.

- Growth and expansion of the system is likely to be cornered by privileged and elite section of society. Therefore, special 'safeguard' have to be set in place to reach out to the disadvantaged and marginalized groups.

The following measures can be considered :

- Priority should be given to women by implementing those programmes, which would serve the interest of the disadvantaged groups.

- New facilities (Distance Education and others) will also need to be set up in those areas and locations with concentration of minority and backward areas. Example was given from U.P., where survey of colleges revealed that several blocks did not have a single college. Therefore, the 10th Plan should give priority to such blocks.

- As far as possible establishment of modern teaching facilities should be included along with the distance mode of education as an integral part of the expansion plan.

Policy and Planning Approach

- In the proposed expansion the private system is to assist the public system and not replace it. While participation of private institution is inevitable, its role should be regulated and monitored carefully

- Planning process should not be for the public funds only, it should be sectoral. Hence, planning for the education sector should be based on the contribution both from the public sector as well as private sector, for the development of higher education.

- Private sector is likely to fulfill only partial needs of the higher education. Therefore, public funding will be necessary to fulfill other critical needs of the higher education. However, private sector should be partially absolved of its social responsibility, including providing affordable education to women and other disadvantaged groups.

- The private institutions should set up funds for providing sufficient number of scholarships to the weaker sections of society.

- In implementing the expansion programmes, sufficient attention should be devoted to all disciplines such as humanities, sciences, arts etc. This is essential because of the future inter-disciplinary requirements of knowledge workers and for the development of holistic personality.

- The curriculum content of the Arts and Humanities should also reflect the changing needs of society.

- Similarly, Science, Engineering, IT and other technical and professional programmes should have sufficient content relating to arts and humanities to understand the social and economic dimensions of society.

- This should also introduce sufficient flexibility in new programmes to enable students to acquire knowledge in an inter-disciplinary framework, which may necessitate the *'Cafeteria Approach'* towards curriculum framework.

Refocusing on Undergraduate Education and Development of College

- The general consensus was that the thrust of the 10th Plan should be on under-graduate education. Due to the increasingly poor standards of school education, their lack of preparedness for the openness of the college system, their nurturance has to be at a level lower than the university, i.e. at the under-graduate level. Special inputs, which are qualitative and gap-bridging in content, need to be developed. University educational standards will continue to suffer unless remedial action is taken at the under-graduates level.

- For the above, nodal center should be created, more so in backward area pockets, with facility of sharing equipment and specially oriented staff. The effort should be in the direction of strengthening the foundations of higher education through the college system.

- The better performing colleges and university departments should be given autonomy. The others who remain within the University system

should be prepared gradually for autonomy and released from the University system.

- Once the university system is less burdened with the responsibility of the affiliating system, responsibility for :
    - Continuous training of staff.
    - Generating teaching – learning resources.
    - Setting up a documentation center and a resource center for the colleges utilising the well recognized college teachers to assist others seeking help or guidance, especially the newly appointed teachers.
- The focus should shift from direct monitoring of each student for admission and examinations, the university should strengthen its monitoring system to monitor each college and strengthen its capacities, lay down standards, and initiate actions to develop the under-graduate base. The university needs to develop both backward and forward linkages between undergraduate and post-graduate education.

Content of Body of Knowledge

- All course must have "hands-on" experiences as their regular course content.
- Cafeteria approach to be followed to open up the entire learning system, allowing students to make various combinations of courses.
- Special social development and interdisciplinary courses should be introduced.
- Semester system, and credit and electives must have inbuilt flexibility for fulfilling credits.
- Science courses, and also those in Humanities/Social Sciences and Commerce should have (areas) capsules of Humanities/ Social Sciences & Science in each other for basic understanding applicable to their functioning in society and more wholesomeness in each of the products (students).
- Human Rights and Gender Sensitivity Courses must be introduced, not as mere topics in a course, but as required foundation courses in all faculties, and as full-fledged area of study.

- To facilitate interdisciplinary courses and encourage flexibility in the system course audits be permitted or extra credits earned which can appear on their transcripts but not added to the required total credits/marks.

- Strengthening of languages is also essential, especially the language of instruction in higher education. Since most reference books are in English, it needs to be paid special attention.

- Teacher and student exchange programmes be introduced even within the local geographical areas – (nodal centers could be the enabling body if necessary) to enhance the spread and strengthening of the course content.

Teaching-Learning Process

- Constant assessment and monitoring be established.

- Specific vocational courses be developed.

- Specific processes be introduced where industry and community linkages are established.

- For the teaching-learning process to be effective, there should be more qualitative emphasis on the recruitment of staff and skills in teaching be imparted to the staff.

- Integration of career orientation in the mainstream courses be made possible at an early date. The urgency has been enacted due to the increasing unemployment of graduates, which can lead to a potentially explosive situation – political and social.

- Collaborative group-based learning be encouraged, along with self-initiating learning.

- Dual mode, i.e. conventional and distance mode of learning be combined in the same degree course for the same student. This will increase recruitment, if, in one semester one group of student is admitted, while, in the next semester, these students take courses off campus, another group can be admitted. The college/university can decide which course can be given off campus.

- Grading system must be introduced.

- Assignments and projects must be part of the credit giving system.

- Unless numbers in the classroom are controlled, quality education, with the above recommendations, cannot be implemented.

Career Orientation

- Community colleges must be established to provide a wider learning base for aspiring students and they should be awarded associate degrees.

- There is a need to review existing vocational courses and offer those pertinent to the present-day economy as also to rural development for colleges/ universities located in district/taluka places.

- Invite industry and government departments for their requirements.

- Use of IT, and material production from such aids be made compulsory for all students.

- Centres for excellence be set up.

- Education must encourage identification of careers as goals and community outreach programmes should be established.

Assessment, Monitoring and NQF

- National Quality Assurance Authority for Higher Education should be separated from both regulatory and funding bodies.

- It is necessary to avoid duplication of review by various professional bodies, which are existing at present and may come up in future. However, no review should be carried out by Quality Assurance Authority without the consultation and representation by these professional bodies. These bodies would actively participate in the development of norms and parameters of assessment and accreditation of professional education.

- The National Quality Assurance Authority may also have provision for recognizing other accreditation agencies/institutes and organisations/ councils for carrying out the work of assessment and accreditation.

- CDC will assist self-study reports of colleges. Every affiliating university Vice-Chancellor may be requested to get self-study reports of the colleges affiliated to the university and in-house review of these self-study reports may be carried out by individual colleges and collectively by College Development Councils. First stage review may be done by College

Development Councils of the universities. Directors of these Councils may be oriented and prepared for this work.

- To start with, the assessment and accreditation is to be made mandatory and time bound, keeping in view the structure of NAAC and NBA, but it might also lead to dilution in quality assessment, which in turn may render the whole exercise futile. Therefore, the assessment and accreditation of universities and colleges should not be mandatory and in no case it should be time bound. Instead, various incentives in terms of financial and others be linked with accreditation so as to motivate institutions to come forward for accreditation.

- In order to maintain its credibility and resultant effectiveness, the accrediting agencies like NAAC and NBA must have full academic and functional autonomy. The accrediting agencies must also not be part of the funding agencies.

- As the output of higher education has to compete ultimately in the national/international job market the international level of curriculum (knowledge level) and student attainment (capabilities) should be kept in view so as to ensure that quality of the Human Resources developed is of comparable standards.

- The group noted that benchmarking has been done to some extent by NBA/NAAC. However, it is recommended that this may be reviewed from time to time.

- After quality assessment and accreditation by the bodies through external peers, the strengths and weaknesses should be identified and communicated to state councils or any other identified state body to enable them to pursue and rectify the weaknesses and improve quality. The national authority should also have a function to assess/accredit informal, distance learning and other programmes.

- In view of qualitative growth competent faculty developments in emerging and thrust area like ICT, there is a need to train teachers for creation of knowledge base keeping in view the future requirements. Academic Staff Colleges should be strengthened and made fully autonomous so as to explore innovations; effective methods of teaching, and ICT courses may be offered through Academic Staff Colleges.

- In addition to the identified indicators of quality assessment the tools should take into account the efforts of the institution towards personality development, communication and counselling for sensitive attitude development of students.

- The transfer of credit for skill development among the students by industry/non-formal institutions be worked out by a committee with regard to weightage for credit and the requirements of the higher qualifications keeping in view conditions prevailing in our country.

Benchmarking

- In view of the globalization of Higher Education, there is need for accreditation of the institution/programs. A detailed mechanism is to be worked out together with benchmarking for assessing both Indian and Foreign Institution concerned. The benchmarking is to be reviewed once in every 5 years.

- While assessing quality the following may be taken into account :

    - The existing ENT (Economic Needs Test).
    - Career Counselling Unit.
    - Alumni Interaction Unit.

- Efforts should be made to develop mechanism of National Qualifications Framework for horizontal and vertical mobility of students, recognition of formal and non-formal and private providers of education as well as for transforming the system from input testing to outcome of learning testing.

lanagement of Higher Education

The new institutions and universities should be established only after preparing mprehensive Master Plan, mapping the locations and manpower needs, population owth and its dispersal. Such a plan for all the universities in the :

Coordination and Management

- There are as many as eight apex-coordinating bodies for universities, like UGC, AICTE, MCI, BCI (Bar Council of India), DCI, Council of Architecture etc. These often follow different approaches and norms. In order to avoid confusion on issues a coordination committee be established to bring them on a common platform and sort out differences in approaches and norms. These bodies should set guidelines for proper functioning of the universities, but should not act as controlling agencies. There should be a uniform policy perspective for the coordinating bodies.

- Presently any decision taken by one central university has a bearing on the working of other central universities.

    - In order to coordinate all the Central Universities, a Council of Central Universities be set up in UGC/MHRD. This Council should coordinate the development in all the central universities and take decisions of common concern.

- Gnanam Committee, followed by Sonari Committee had made recommendations for reforms in University Management. These recommendations be implemented to make the university administration effective.

- The different levels of governance in the university like Academic Council, Senate and Executive Council be remodeled in size and content by introducing the principles of management and be managed by professional experts.

- The Board of Studies may be empowered to take decisions with regard to curriculum, contents and methods of studies. Academic Council should only concentrate on major policy aspects like credit and semester system and so on.

- Higher Education Management Institutions may be set up at each state for training of University Administrators. A National Level Institute may also be established to give guidance to the State Institutions.

- There is an urgent need to review the UGC Act and several university Acts to make them functionally responsible.

- Presently most State Universities are bound by territorial jurisdiction. In the present situation when the education process is being greatly influenced by computer and Web/Internet based education, the concept of territorial jurisdiction needs to be reviewed and universities must be empowered for not only an All-India but also for global participation. Universities should be assisted to establish a cell for promoting internationalization of education.

- The administrative and office procedures in the institutions of higher education are cumbersome and costly in terms of time and energy. The office management procedures need to be simplified and rationalized.

    - Decision-makings is not based on objective facts and is rather directed by subjective perceptions. Executive information system

seems to have been postponed for too long. Adequate financial assistance needs to be provided to universities for office automation and for initiatives to make their management more professional.

Planning

- A perspective plan ought to be developed for higher education at the national, state and institutional levels. Each institution of higher education be made to develop its perspective plan and vision documents, which must be in line with the perspective plan of the state and the nation.

- A comprehensive mapping for identifying locations for establishment of new institutions of higher education. Such a mapping is urgently needed at the national as well as the state level. The mapping exercise would provide a master plan for the type and number of institutions of higher education that need to be established at various locations in the country.

Efficiency Incentive

There are strong indications that the system of higher education at the institutional, state and central levels--suffers from systemic inefficiencies. Higher education must become cost-conscious and should streamline their working and management so as to optimize their expenditure. The prevalent system allocating maintenance and development grants to higher education perpetuates inefficiencies. The mechanism of funding ought to be revised so as to provide incentives and encouragement to institutions of higher education in their efforts to cost-saving and resource-use efficiencies.

Data Base Management

Planning and Management of Higher Education, often becomes ad hoc in the absence of an appropriate data base. UGC should have developed certain data base, but are lagging several years behind and do not have any database on non-formal system of higher education. A good system of computerized data base management both for formal and non-formal streams is needed for better planning and efficient management of the higher education system. Accordingly a computerized data base management system needs be developed during this plan.

Financial Aspects and WTO

Higher Education is in crisis today facing a double burden of a dual challenge On the one hand, it has to face the challenge of meeting the requirement of the economy for R & D based technological competitiveness. On the other hand, the ongoing WTO negotiation on Trade in services including Trade in Educational Services presents issues, which have very serious implications for higher education.

- A substantial quantum increase in plan allocation on higher education is warranted in the 10th Plan, as it was done for elementary education in 1986, following the adoption of the New Education Policy.

- It would be important for the government to put in place an appropriate consultative mechanism to look into all aspects of Trade in Services which would include Trade in Educational Services for the second round of WTO negotiations. The consultative body would inter-alia:

    - advise on negotiation on higher education issues in WTO.

    - advise on issues relating to erecting safeguards for the post-negotiations market-access regime.

Apart from these broad recommendations, the following specific recommendation may be seriously considered :

- Serious thinking is required to extend the benefits of higher education to the less privileged section of society. Towards this, an Educational Development Bank should be created.

- Private relevant institutions of higher education should be encouraged provided they adhere to equity parameters determined by appropriate regulatory mechanism.

- Optimum utilization of public infrastructure and manpower in the higher education sector should be ensured.

- User-agencies (both Govt. like primary sector & the private corporate sector) should be encouraged to contribute to financing of higher education.

- In the light of growing worldwide competition, requiring inputs from higher education, basic research should be strengthened in the university system.

- Funding should be provided to colleges on an "Adequate Basis" after taking unit cost into account. However, the present system of assessing unit cost developed by UGC needs considerable refinement.

- Towards safeguards in the post-WTO negotiation regime, the task force/committee that is an assessment body for *Economic Need Testing (ENT)* be set up at the national level. Similarly, Career Counselling Unit and Alumni Interaction Unit at university level, to explicitly take care of aspects of trade in higher education services be encouraged :

    - the choice distorting effects of brain drain on the students.

    - tap the benefits on prospects of students in higher education and movement of national persons under mode 4 of WTO.

- Universities should also consider setting up a Cell for taking care of internationalization of education, both for import and export.

    - Role of Centre in Educational Finance should be increased vis-à-vis States.

    - Universities may devise ways and means to mobilize their own resources through various means.

VI

REALIZATION OF TENTH PLAN OBJECTIVES

(i) Approach of University Grants Commission (UGC)

The UGC has outlined its approach for realization of 10th Five Year Plan goals as follows :

Quality Teaching : The Need of the Hour

A graduate degree attains more value if it develops a sound base in fundamentals and builds all round personality in students. In addition it should also inculcate skills that will enable them to launch into the professional world.

The need, therefore, is to establish quality teaching at the undergraduate and postgraduate level. Looking at the disparities that exist in India in respect of appropriate academic and other support infrastructure in colleges and universities as well as the diversity of teachers, it is essential for us to adopt a new strategy of giving quality education through the information pathway.

An information flow network would, therefore, be established by creating inter-connectivity in all the universities. Each university would have assured reliable bandwidth for uplinking and downlinking purpose so as to put them on the Intranet and Internet pathway.

Each university would be encouraged to establish linear area network so as to create connectivity on the campus, Universities would also be helped to establish college-network for connecting all the colleges in the jurisdiction of the university. There would be thus a network for information flow in each university and the network connecting each of the universities in the country.

The knowledge connectivity map will thus emerge for the entire country. It would facilitate flow of information to support teaching and learning process through multi-media material, computer graphics support material, flow of reference material (in

rint form) and audio material. This would enhance the academic infrastructure in lassroom virtually by providing access to support material to the teachers.

Creation of a communication network for free flow of knowledge would enhance ıe access as well as quality in higher education. The information network would form a ackbone for content development and for flow of contents, be it ir demonstration xperiments, laboratory experiments, multi-media education material, audio material and rint material. However, the true enhancement in quality would come if such teaching-upport material were available for use in the classrooms and laboratories. This means ne has to undertake a massive exercise to develop multimedia teaching support material. JGC would encourage universities/departments to establish state-of-the-art Content)evelopment Centers and fund teachers to develop multimedia based teaching material. hese activities would have discipline/subject orientation and would be operated in ecentralized manner but supported by a national co-ordination mechanism. There would ave to be a massive teacher orientation compaign not only to update their knowledge ase in their subjects but also to imbibe healthy work culture practices. The activities of he Academic Staff Colleges would be further strengthened and they would be given the ask of teacher training and orientation activities to be undertaken in a professional nanner on a continuous basis.

A massive training activity would be undertaken to make teacher community iterature in multimedia material development. International collaborations would be stablished with institutions/universities to initiate (and share) joint activities. The eachers would be given incentives and rewards for producing academically good and ich material.

To accept the future challenges in various disciplines so as to widen the nowledge base of students at a postgraduate level the "cafeteria approach" would be)romoted in curricular structural arrangement. The concept of core and optional courses vith modular credit based approach with a possibility of doing these courses in open and lexible manner would be promoted. UGC would review and strengthen the existing urricula in each subject through its curriculum development centers and work out mplementation strategy with the help of panel of experts in each of the subjects. A

special program would be launched to develop print material (books) in English and regional languages. In addition intensive support would be given to hold subject workshops, seminars so to enable teachers to think and work new approaches in teaching and learning in their own disciplines/subjects.

The present market economy works on the principle of the division of labour, which also implies division of "knowledge". General education needs to be made career orientated so that rather than clamouring for "administrative" government jobs (which are in stagnation presently and bound to be on decline in future) the trained "generalists" would find more opening at middle-level skill demanding jobs. UGC would like to encourage large number of skill-oriented and value-added add-on courses in colleges to be taken by students in parallel while doing their degree education. These could be a certificate and diploma level courses to be done at 1st, 2nd and 3rd level during three years period with enhancement in skills and expertise with the passage of time. The universities would be asked to make their three-year structure more flexible so to allow students to pursue both degree and utility oriented certificate/diploma programmes together. The students would, at the end of three years', come out with degree in science/arts/humanities/social science/commerce and skill-oriented & value added add-on career orientation certificates and diplomas. They would thus have a passport to employment and better life. The Vocational Education programme that was initiated in the 9th plan would be further strengthened with added dimensions as spelled out above.

The relevance of higher education, for the past several decades, has been synonymous with inclusion of vocational subjects in the conventional education system. The integration of vocational subjects in the existing structure has built in defects. The teaching and learning in the core subjects is compromised and even professional subject matter is introduced at a marginal level. The graduates are therefore very reluctantly accepted in the industry. Moreover, they cannot become entrepreneurs also. The emergence of knowledge linked societies, in a new economic environment, demand for graduates with sound base in the fundamentals in core subjects. These graduates should be enriched with appropriate utility oriented sills as an add-on thing. This means one has to go for open and flexible education approach where students can pursue simultaneously

a degree and add-on utility oriented programmes. The students, therefore, need to be allowed to acquire an advanced diploma along with a degree or go for one more year of intensive professional subject learning and get two degrees at the end of the fourth year.

One more thing that has to be done is to create bridges for integrating the conventional, open and private education sector. India now has a huge but non-regulated private education sector. The institutes in this sector are mostly involved in job oriented skills generation. This sector not only needs to be regulated but also accredited for quality. The rationalised blending of such private sector efforts with the public education system would also help to address the question of demand and relevance. The clever integration of conventional, open and private education, in an open and flexible structure, would help us to address questions like increasing demand and utility of higher education.

Indian society has several disadvantaged groups like SC/ST and backward classes, minorities, inadequately able-bodied, and women through out the of society. UGC would provide, under the principle of equity, several programmes for such groups like special training activities to enhance skills, hostels, and incentives for professional courses.

UGC would promote teaching and research in emerging areas in humanities, social sciences and pure sciences. The emphasis would to support such areas that cut across disciplines and subjects like health, gerontology, environment, bio-technology, disaster management, defense strategies, applied sociology, stress management, WTO & its impact on the economy, history of science, Asian philosophy and many other areas as would be identified by subject experts.

The universities need also to be supported selectively for achieving greater heights in teaching and research. Therefore UGC would like to identify a few universities with potential, ask them to devise strategy, working plans and mechanism to achieve quality in a their post-graduate teaching and research with well thought plan for percolation of the positive outcome to undergraduate colleges and fund them

substantially to do the task in time bound manner. Indeed these universities would work, in the region where they are situated, as "lead university".

UGC would also like to help by giving block grants to universities situated in geographically disadvantageous areas. The development grants to such universities would be enhanced and would also have a component that would link this with new approaches and assured performance.

One more exercise that would need to be undertaken would be to review and support for replacement of obsolete equipments in university post-graduate departments.

There are colleges that have been doing good undergraduate teaching. Many of such colleges have innovatively used "autonomy" to achieve better standards in teaching. UGC would like to identify such colleges and given them status of "College with potential for Excellence" and fund them substantially to reach higher standards in teaching. Post-graduate education is also done in colleges. Special attention would be paid to this important sector and UGC would fund such colleges to improve and strengthen their infrastructure.

The scientific and technological human capital in India is diverse and in some disciplines and fields ranks among the best in the world. This has been possible because in the 60's best youths went for science education. It has become glaringly obvious that today bright students seem to be shying away from science. The best students opt for professional subjects and today lower/ middle level students exercise their option for science subjects. It is a reality that in a few years' time our top research organizations would have a shortage of good science graduates. UGC would be strengthening science education at the undergraduate level in colleges and universities. It would also promote institutions that would go for integrated five year courses combining teaching with research. These institutions would be "stand alone" systems with direct tie up with research laboratories and industries for sharing of infrastructure and experts.

The real strength of India higher education system would come through allowing colleges and university departments to work in a more open and transparent environment. It is the sense of ownership and responsibility that makes any system result-oriented and credible. UGC would therefore like to pursue the concept of autonomy with more vigor.

Academic freedom with opportunity for enhanced organizational efficiency (allowing innovativeness) would be promoted through reward based Autonomy Promotion Activity (APAC).

Each college and university would be encouraged to adopt quality in their academic and organizational approach. They would be asked to go through the NAAC's process of assessment and accreditation. The emphasis would be to find out (their) strengths and potentialities and to identify their weaknesses and other lacunae. The accreditation process would be linked with financial incentives.

Promoting and Strengthening Outreach Activities

Colleges and universities would continue to play a dominating role in social change through outreach activities. The third dimension of university activity namely extension needs to be further expanded in the present economy oriented environment. Business and society have become an integral part of ones work style and the life long learning is very essential for those who have got education through conventional education system and also those who never got an opportunity to learn. The universities and colleges need to be used as focal point of activities to spread and sustain life-long-learning.

Universities would, therefore, need to be supported to undertake activities in fields like :

- Adult Education, to equip them with skills and enhance their utility, and Continuing Education for people in profession to enhance their expertise and skills.

- Outreach activities in women studies, environment, human rights and rights of vulnerable groups (gender and other socially disadvantaged groups).

- Special training-cum-exposure programs in Value education with special reference to Transition to work culture & work ethics, Transition to Adulthood, Coping with the demanding (and cruel) world, Art of Living, Positive Health and similar topics which imbibe in young minds the values and concepts for sustainable development and raising the quality of life.

Research and Teaching : Hand and Gloves Link

Higher education is a dynamic phenomenon. The teaching & learning process, which imbibes skills in a learner, gets further strengthened if it is integrated with research. Research keeps the process of inquiry vibrant and alive. It is therefore very essential to support research activities in the Universities. The ongoing programs like DRS, DSA & CAS would, therefore, be further strengthened.

The links with other Government agencies like DST, DRDO, DBT, MIT, CSIR, DAE and ISRO need to be used innovatively to support teaching and research in universities. The UGC would muster support from these agencies for initiating/strengthening the existing activities in teaching and research. Indeed it can form an additional component in UGC's 10th plan, which could be out-sourced from other agencies.

The UGC on its own would widen (in terms of areas and scope) and enhance (in terms of total allotment and upper limit for funding) the scheme of research funding so as enable the university teachers to take major research projects. The emerging areas, apart from in the field of science and technology, in liberal arts, humanities, social sciences, literature, economics, law etc. need to be identified and supported for funding. The UGC would set up a Research Funding Council for bringing research centre stage of university activities.

Interdisciplinary research in all fields would be given priority. The focus would be on promoting core-research in allied fields and to think of "ideas that would work". Special funding needs to be allotted for this purpose.

One more area, where special efforts have to be done, is in cultivation of a culture for (a) doing more applied oriented work and (b) safeguarding research outputs. The university research workers are unfamiliar with the process of patenting of knowledge. They do not also have a financial support to undertake such a task. UGC would give emphasis on this aspect and separate funding needs to be allotted for this innovative aspect.

Inter-university centers concept has been effectively used to create :

- Centers, which concentrate on research in specific fields, (research IUCs') like NSC at New Delhi, IUCAA at Pune, UGC-DAEF at Indore and Indian Institute of Advanced Studies, Shimla.

- Centres, which do support job to enhance the quality of teaching and research support (IUC's), like CEC at New Delhi, NAAC at Bangalore and INFLIBNET at Ahmedabad.

The Research-IUCs' were established with certain objectives and there is need to revisit these objectives and to write focused mission statements for a decade to come. Firstly it would be to make the centers infrastructure wise (from scientific capability aspect) state of art and secondly to create operational mechanism so as to give access to all desirous research workers (inter university center's give service to research scholars and teachers in colleges and universities). They should have plan for a decade and think of development components that could be included in the 10th plan.

The Support-ICUs' would have to adopt professional working approach to meet the pressure of "volume demand". The exercise should be to ensure fast and efficient service of desired standard. One would have to mix modern technology with optimal human power to achieve the desired goals. They also need to plan for a decade and think of the components that could become the part of the 10th plan.

The concept of national centers would be strengthened and information centers at I.I.Sc., Bangalore, SNDT Mumbai, and M.S. University, Baroda would form repositories for scientific literature and data and they would be on the backbone of the information route. They would hold all research journals in different disciplines and subjects in of their server's electronic mode and provide service to all colleges and universities. This would enhance researchers access to research resources through out India, which in turn would improve quality of research in universities.

Exporting of Higher Education and Internationalization of Higher Education

In the context of globalization of higher education it is necessary to evolve policies to promote the free flow of students from other nations to India as well as to allow Indian students to get educated in other countries. The Indian higher education

system is now recognized as one of the better system for producing talented human workforce. Foreign universities are also keen to establish their activities in India through "twinning arrangements" with Indian universities.

UGC would promote opportunities for foreign students for educating themselves in our colleges and universities. This would be done by promoting "study aboad" program for foreign universities and also by reserving a certain percentage of seats in each of the degree programs. Special management approach would be adopted by setting up an International Cell in each university.

Universities would be encouraged to expand their activities outside India by promoting web-based education and also be by initiating twinning programs in other countries. Special-funds would be provided for triggering export culture in universities.

Managing and Organizing Higher Education

The management of colleges and universities, in the rapidly changing education scenario, needs to be done in a more professional and efficient manner. The system has become very big and complex. The complexity comes mainly because working of universities basically stem from fusing of decisions of academic matters (that are taken by various Authorities and Bodies) with operative strategies. The entire academic decision making process is committee based and weak links exist in conversion of such "resolution-based-decisions" in to "student friendly" operative mechanism. Moreover the system has become big in terms of number of disciplines and subjects it caters to and the sheer number of students who participate in the process of learning. Thus the sheer size of the system and the competitive scenario that is emerging because of the globalization of education demands the UGC use ICT in management and organization of higher education. UGC would, therefore, develop an approach for making college and university administration more professional with open and transparent approach. The MIS approach with use of computers would be implemented in each of the colleges and universities.

Funds for Higher Education

Higher education requires funding not only to retain but also to enhance its' newly found identity (the Nation that generates knowledge experts). The funding for education as a whole should, therefore, be taken to the promised level of 6 per cent of the GDP with a prorata increase in the share of the higher education sector. The higher education sector would be in turn be encouraged to internally generate at least 25 per cent of the recurrent expenditure by :

- Developing a differential fee structure[1] based on the economic capacity of the students/parents;[2]
- Promoting profit making outreach activities useful for industry and society, in general; and
- Generating resources through India Studies programme abroad and export of higher education.

UGC would provide matching grant on one is to one basis for funds generated through innovative activities with the condition to convert total funds into an endowment to be utilized for development purposes. The concept of a Higher Education Development Finance Corporation needs to be translated into reality. It would help in providing venture capital to colleges and universities so as to embark on innovative teaching and learning programs. It would also create a base for giving soft loan to students.

(ii) Approach of Open & Distance Education System

Open & Distance Education is a new paradigm which can respond appropriately to many challenges identified in preceding pages. Some of the elements of this paradigm shift are :

[1] One needs to evolve a fee structure, which is realistic to match the cost of education. While implementing such a realistic fee structure provision will have to be made for giving subsidies to meritorious students and also to students who have got "access" under special provision for admission. This subsidy could be partially compensated by charging higher fee from other students.

[2] This should not anyway disturb the "access" given to weaker section through "reservation". Someone who has got admission because of "special provisions" should get Government support by way of subsidesied education.

- From classroom to anywhere.
- From teacher centric to learner centric.
- From teacher as instructor to teacher as facilitator
- From mainly oral instructions to largely technology aided instructions.
- From fixed time to anytime learning.
- From "you learn what we offer" to "we offer what you want to learn".
- From education as one-time activity to education as life long activity.

Understanding the paradigm shift is useful for assessing the present practices and moulding the future of open and distance education in India. The present scenario can be reviewed in the context of this background.

Present Scenario

The Indira Gandhi National Open University has emerged as a major national level initiative to promote open and distance education in the country. Since the emergence of IGNOU in 1985, there has been a major expansion in distance open education and, as of today, we have succeeded in having 9 State Open Universities and 64 Correspondence Course Institutes together with an apex regulatory and statutory Council, viz., Distance Education Council (DEC) with the primary responsibility of promoting, determining and maintaining quality of distance education in the country. A very new and encouraging concept that has emerged in our country through IGNOU and DEC is to establish strong linkages for sharing of self-instructional material, human resource, infrastructure etc. The Planning Commission had recommended earlier that every State should have at least one Open University. This goal is yet to be achieved and we would like this to happen during the 10th Five Year Plan. At present, we have a total enrolment of around 22 lakhs students constituting about 20 per cent of the total enrolment in higher education. The conventional system and Open and Distance Education (ODE) system in the country have been witnessing, respectively, about 5% and 15% growth-rate in students' enrolment.

IGNOU has expanded its Regional Centres and Study Centres Network not only within the country, but also outside. IGNOU's academic programmes are being offered in Doha, Kuwait, Sultanate of Oman, UAE, Mauritius, Maldives and Seychelles. In collaboration with UNESCO, Postgraduate Diploma in Distance Education is being offered in Ethiopia and Liberia. IGNOU has also been offering visiting Fellowship to ODE professionals abroad under the Staff Exchange Scheme.

Institutional Arrangements

In terms of institutional arrangements, distance education provision is made possible by :

- Dual mode Conventional Universities having Directorates of Distance Education/Correspondence Course Institutes (CCIs)
- Open Universities
- Virtual Institutions
- Private Initiatives
- International Initiatives

These five models need brief elaboration. The CCIs in conventional universities were set up to expand access. The open universities came into existence in response to the need for designing new organisational structures which could overcome the limitations & rigidities of the conventional system; the focus was on setting up new institutions geared to meet the paradigm shifts in education. Virtual institutions can be considered as extension of open universities. They employ information and communication technologies for on-line education and hence have new arrangements and provisions in addition to many of those prevalent in the open learning system. Private initiatives are market-driven and profit-oriented which shape their policies, structures and operations. Foreign education providers are making inroads into India.

Practice : One System, Many Models

Open & Distance Education, over time, has seen many stages of development in teaching and learning modes/ material and as also in its delivery mechanisms. The

teaching-learning process in open education in our country is effected, at present, through a mix of print-based study material (first generation), multi-media (second generation), interactive teleconferencing and radio-broadcasts (third generation) and on-line delivery (Internet/virtual mode-fourth generation). However, most institutions are now shifting to using third and fourth generation modes of teaching/learning.

The IGNOU in keeping with these trends has recently launched the virtual campus initiative and is offering now a few on-line IT education and training programmes. The use of interactive television for distance learning (also called one-way video, two-way audio teleconferencing) has been employed through a satellite channel, known as Training and Development Communication Channel (TDCC), to reach learners/participants spread over large distances at a number of locations in the country. The dedicated Educational TV channel (Gyan Darshan) launched by MHRD and Ministry of IB with IGNOU as the nodal agency has become a full-fledged 24-hour channel. And under the Gyan Vani Radio Broadcast Project, three radio stations – Lucknow, Coimbatore and Vishakhapatnam – are scheduled to start soon in 2001. These media tools have the enormous potential of increasing the provision of distance education, and in providing strong support in making it flexible, interactive, individualized, and a lifelong activity.

Concerns

A critical examination of distance education practices in the background of public policies and the societal needs reveals many gaps between the promises/intentions and the performance of institutions. Some of the major concerns here are access, flexibility and innovativeness, use of technologies, quality concerns and system development.

a) Access

Distance education is based on the philosophy of broadening the reach of education and training. The policy framework refers to the need for increasing enrolment, particularly from the disadvantaged groups, and for starting job-oriented/skill-

development programmes with the active participation of user organizations. In practice, there are limitations in realizing these goals.

We have 10 open universities with annual individual enrolments varying from 2000 to 300,000 and about 64 CCIs with enrolments ranging from few hundreds to one lakh each. We may infer from this situation that the potential of the system has not been fully exploited yet. In a highly stratified society like India, egalitarianism refers not merely to numbers, but also to the socio-economic profile of these students. Though data on the profiles of the distance learner is sketchy, it does indicate a middle class, urban/semi-urban bias in student composition. The disadvantaged sections – rural women, scheduled castes and scheduled tribes - are not adequately represented. The issue of language is also critical particularly when we speak about the Internet technologies. The Internet is dominated by the use of English. The majority have only single or two-language capability. We must find ways to communicate the content available in our languages seamlessly and effectively. It is only then that we can fully address access issues in web-based education.

Physically challenged/differently abled persons constitute about 10% population of the country. This human resource capital has got to be specifically enabled so as to become self-reliant, self-assured, and self-esteemed contributors in national development. The Disability Act of 1995 defines specific problems of persons with disabilities, and describes "Education", inter alia, as one of the important provisions of their empowerment. The Act provides for the development of disabled persons in different areas, so that they develop confidence in themselves and reduce their dependency on others. The Act also stresses the need of necessary provision at public places and institutions to facilitate their movement, communication and interaction. It also recommends affirmative action in capacity building, rehabilitation and employment.

Rehabilitation is a high priority area on the government agenda. A number of schemes, programmes and projects are being implemented/ supported by the Ministry of Social Justice and Empowerment. The network includes - (a) Various National Institutes catering to the needs of those disabled (b) Rehabilitation Council of India, (C) National

icapped Finance and Development Corporation (NHFDC) and (d) Regional ɔilitation Training Centres (RRTCs) and District Rehabilitation Centres (DRCs), he outreach of these institutions can be increased enormously, and the impact of the ilitation programmes enhanced with the support of of the Open and Di-tance ıtion System.

Market Demand Vs Societal Needs

Initially the distance education methodologies were used more for providing l education. In recent years, there has been a shift in the nature of programmes d through the distance mode. The most popular programmes of IGNOU are ıation technology and management programmes followed by teacher education, ı education etc. These are the programmes which are in demand in the labour ɔt. Educational institutions are responding to this market demand. But in the context veloping countries like India, the market may not be a totally dependable criterion to e on social priorities. There is a large section of people who are outside the market work whose needs have to be taken care of. Market forces may not be interested in education in socially useful areas like environmental education, human rights tion, consumer rights education, health education and basic education. Public ıtions have an important role in maintaining the "public goods" character of ıtion. It is rightly observed "education is a community asset which cannot be ıted by market forces alone".

The potential of the system of lifelong/continuing education of the working ɑtion is also not fully explored. The training/retraining of public sector employees, trial workforce etc. can be undertaken on a mass scale at regular intervals only by ıce mode.

Flexibility and Innovativeness

Even though distance education institutions have provided some elements of ility and innovativeness, there is still lot more to be done. The conventional rsity administrative systems and practices have influenced to a great extent the

management of open learning institutions. Requisite flexibility in structures and flexibility in operational arrangements are required to respond quickly, effectively and differently to the complex situations and different requirements of distance education.

d) Use of Technologies

No single technology can be used at all occasions and for all-purposes. Technology choice should take into account availability, accessibility, and acceptability. Priorities in the use of technologies for distance education may be different in different contexts. The possibilities of outreach and economies of scale are important considerations in developing countries, rather than individualized access and interactivity.

The creation of technology infrastructure for education may not be a difficult job in view of the reduced costs of technology and the globalization process. But a more difficult job in the developing countries is the maintenance of technology-aided infrastructure. After sales - service, work culture, and attitudes also affect the use and maintenance of technology, hence the productivity.

e) Quality Concerns

Many experts fear that mass education may dilute the quality of education. Nobel Laureate Prof. Amartya Sen rightly expressed the concern of many when he said that "*University education in India is in a state of crisis. It is not a crisis of lack of resources. It is deterioration in quality. The quality would vary from one university to another. However, the minimum level of quality should be ensured*".

This statement is equally applicable to distance education. It is quality across the board that is required. It must be emphasized that quality is not merely good print learning materials. The whole range of learning & training experiences at delivery centres in terms of the quality of counseling, conduct of examinations, quality of other support services and peer group interactions are very important for quality distance education provision. ODE will continue to improve its quality education and address such issues.

Open and Distance Education (ODE) system is also deeply concerned with the quality of education being provided by a large number of universities to a large number of students enrolled as "external candidates /private candidates/non-collegiate candidates" who are awarded equivalent degrees/diplomas without any effective quantum of academic inputs from institutions.

These students lose on two counts:

(a) they are denied facilities available to regular students in conventional system, and

(b) they do not have access to technology-support, study material-support and counsellor's interaction provided by the ODE system.

This group is viewed as the weakest rung in the education system and to take this category of students under the Open Distance Learning system is one of the high priority areas of the Xth Plan.

f) System Development

The system is quite complex and the complexity comes as it is a fusion of academic and industrial processes. Further, the system is substantially big in terms of the number of students, vast geographic expanse, courses & programmes and student support services. The operative mechanisms for some of the major activities i.e. needs assessment, production of materials, inventory control, delivery of the material and monitoring of counselling and examinations have not been standardized. The efficiency and the effectiveness of the existing structures and processes have not been assessed due to limited research activities in the open learning system. These issues are becoming important as the system is growing exponentially, and the concern for its accountability is also increasing. Hence the system needs to be further developed and standardized to meet the nation's educational objectives.

Key Thrust Areas

The O & DE system in the country has shown substantial growth and development in the last decade. Its impact on the educational system in the next decade

will be more pronounced and visible as 'learning throughout life' and 'technology-based teaching/learning' have been recognized as the new portals of education.

IGNOU's achievements of the past few years are not any longer conjectural objects but a physical reality, and as we enter the new millennium, the prospects of the university reaching high levels of excellence, and making its presence globally felt are exceptionally bright.

Convergences

Three types of convergence need to be fostered: institutional convergence; convergence in modes of delivery and convergence in transfer of credits and movement of students. It can be expected that the formal and non-formal sectors, and the conventional and open universities will witness creative convergence. Each type of institution will acquire characteristics of the other in response to the changing demands from learners and the need for learning throughout life. So, face-to-face teaching/learning will be enriched by distance learning inputs and also distance teaching/learning will be enriched by face-to-face learning inputs. Concomitant to this will be the convergence of delivery modes from print to multi-media to interactive to virtual media with face-to-face counselling. Flexibility in institutional arrangements will permit students to move easily from conventional to open institutions or from formal to non-formal sectors and vice versa. Provisions for credit transfer would greatly facilitate such processes. Convergences would be further facilitated by building the desired networking and partnership arrangements. University Grants Commission (UGC) and IGNOU can jointly undertake the operationalization of these arrangements.

Special Measures for Disadvantaged Groups and Disendowed Regions

The enrolment of the distance learners in Open and Distance Education System in the Tenth Plan period is expected to rise significantly to about 40 % as against 20 % in the Ninth Plan period as a percentage of the total enrolment. The emphasis here would be on increasing access from the disadvantaged groups and underdeveloped regions with an accent on educationally backward Regions/States/Blocks. Projects like 'Educational

Development of the North-East States and Sikkim', 'Panchayati Raj' and 'Women Empowerment' undertaken by IGNOU are affirmations of the efforts IGNOU is making in this direction.

Open & Distance Education (ODE) is the most suitable mode of imparting education to people even with acute disabilities because the system offers a handicap-mitigating environment for teaching/ learning processes by the usage of appropriate technologies (Multi-media, Interactive- Teleconferencing, TV/ Radio Broadcast and Virtual initiatives). Some of the specific measures to promote the enrolment of the members of disadvantaged groups in the open learning system could be: (a) Setting up of Regional Centres and Study Centres in the areas of SC/ST concentration; in the National/ Regional/ State Level Centres for Disabled and in low female literacy districts; (b) Differential fee system favouring disadvantaged groups; (c) Fee exemption & Scholarship schemes; (d) Bank loan schemes and (e) Development of specific programmes and remedial counselling.

Programme Relevance

The selection of academic programmes has to be made against the backdrop of societal needs and market requirements. It would, therefore, be appropriate to incorporate new programmes related to the areas of agriculture, biotechnology, and design as also gerontology and enabling the disabled. In the development of programmes, employable skills, entrepreneurship development and human values would have to remain in focus. Short term skill development programmes would also be useful in breaking new ground in outcome-based education, and reducing the high levels of underemployment and unemployment in the country.

Workforce Training

Organization structures, the work-environment and skills needed by workers are in a state of constant flux. The need for job enrichment and changing techniques of job performance apply immense pressure on individuals for continuous upgradation of skills and acquisition of multi skills. Employers need to become distance educators and

companies are increasingly appreciating the value of educating their workers through the distance mode. They are, therefore, preparing and procuring customized modules for training of their employees at various levels. It is important for distance education institutions to see this as an opportunity rather than as a threat. The corporate sector has acknowledged the important role such institutions can play in designing and delivering instructional inputs. Government departments can also participate in training and educating their workforce through the distance mode in collaboration with educational institutions. The distance mode has considerable potential for reaching workers at their work sites with relevant educational inputs for upgradation of skills and enhancement of knowledge. The O& DE system should also develop a mechanism for providing the certification of work-proficiency and work experience to people in the organised sector as well as unorganised sectors (qualification framework/accreditation) so as to provide for increased opportunities in the job market. This would facilitate "learning throughout life".

Broadcast Media Initiatives

Presently the focus of broadcast media is on enrichment programmes. The emphasis would gradually shift to curriculum-based learning programmes. The broadcast media initiatives also contribute to the development of a learning society. Distance education implies the use of "open media" as compared to "restricted media" in conventional education. Educational inputs provided through diversified Internet and broadcast modes would be "open" not just for the target group but also for the society in general. Activities of Gyan Darshan (TV Channel) and Gyan Vani (Radio Broadcast), undertaken in the IX plan, would be expanded in range & depth and consolidated in terms of content and quality in the 10th Five year plan. The present use of C band for TV broadcasting (Gyan Darshan) is likely to be upgraded to Ku band in the DTH mode. Gyan Vani Project is expected to culminate in setting up of 40 radio stations for FM broadcast serving the local communities for educational and social development. Integration of public and private initiatives is of considerable significance in sharing experience in software development, as the members of media cooperatives and private channels can complement the efforts of public channels.

rtual Initiatives

The convergence of technologies provides important opportunities for enriching e learning experience of distance learners. Open universities such as IGNOU have eady started offering courses through the online mode. In most Distance Education stitutes/Directorates, the transition is being made from exclusively print-based delivery ode to multiple media course packages. We need to extend the continuum to virtual livery modes across the country in both open universities and Distance Education rectorates of Conventional Universities. This will enable distance learners to have cess to multiple options in learning. In future it must be envisaged that every institution ould encourage virtual initiatives.

mmunity-Based Delivery System

Creating community-based infrastructure for delivery of relevant information and owledge provides a solution for reaching the masses. Such infrastructure creates access communities rather than just individuals. Infrastructure can be created by the overnment, but the management of the tele-learning centres and community learning ntres should be done by the community members themselves. The operation and aintenance costs may be recovered from the users for making the centres self-sufficient.

stem Development

IGNOU is expected to play an important role in the development of Open & stance Education system which is required to meet diverse objectives through diverse erations. Therefore, standardization of the system is a necessity. It may also be rable to clarify its role and relationship with other apex ties/organizations/institutions, such as Conventional Universities, National Research ntres, National Documentation Centres, IITs, IIMs, and other autonomous institutions. e vertical and horizontal integration between open learning and conventional education ould be developed to reap the benefits of the convergence of the two systems. tworking and collaborative arrangements among national and international providers istance education are also necessary to make optimum utilization of human resources

for overall development. Sharing and collaboration should be based on the principles of equality and value addition. Collaborative arrangements are easy to implement if they are perceived as value additions and give competitive edge to the institutions. System development activities should also focus on human resource development which is essential for the effective use of new educational technologies and for action research for innovation and improvement of institutional performance.

A National Network for Open & Distance Education (N-NODE) is envisaged in the Tenth Plan. It is a dedicated hybrid communication network which uses a combination of technologies such as, Satellite Communication, WILL and optical fibre links suitable to the purpose and place. Such networking is essential in order to have connectivity of IGNOU headquarters with its own Regional Centres (RCs) and further down to a secondary network of Study Centres (SCs) under the respective RCs. IGNOU headquarters will also be connected to all the State Open Universities (SOUs). SOUs may have further networking with their RCs and SCs, and also CCIs (Correspondence Course Institute) in their States. This networking will serve to meet the following objectives: (i) Telecounselling, (ii) Teleconferencing, (iii) Telecollaboration, in strategic matters, with SOUs and also RCs, (iv) On-line Admission & On-line results, (v) Increased interactivity (vi) Quality promotion. For appropriate & optimum use of technology, it is desirable that regular training programmes are organized to support capacity building and staff training. This will greatly help in enforcing quality checks and uniform quality standards.

Human Resource Development

In an increasingly networked and globalized world, acquisition of new skills and updating of knowledge is of critical concern. Human resource development initiatives particularly in the area of development of skills in application of new technologies needs to be emphasized. Conventional and open, public and private agencies can collaborate and create effective networks for pooling the required competencies. As the distance education system in the country expands, maintenance of quality assumes greater significance. The support to quality assurance mechanisms is also dependent on human

resource development initiatives. In this context, initiatives to strengthen academic staff colleges and the Staff Training and Research Institute in Distance Education (STRIDE) would be crucial.

Quality Assurance

O & DE system would continue to maintain such quality standards for itself as are required to match National/international standards. Benchmarks for quality may have to be identified and applied at input, process and output levels. There is a need to develop institutional mechanisms for maintenance of quality in the system, accreditation of institutions, and monitoring of quality in O & DE. It would also be necessary to focus on the education of the external/non-collegiate students who have been heretofore deprived of the quality aspect of education. The DEC would take the initiative, seeking appropriate inputs from NAAC, to ensure quality standards in ODE system

Partnerships with Private Sector and International Agencies

Partnerships between public and private sectors in education can produce synergistic results. By using an appropriate mix of emerging information & communication technologies for connectivity, interactivity and course delivery, Open Universities can contribute, to a considerable extent, in meeting the HRD requirements of the public & private sectors. Therefore, there is clearly a case for symbiosis between the educational community and the industry in general and the ICT industry in particular.

International agencies have evinced considerable interest in collaboration with distance education institutions particularly in the design, development and delivery of relevant educational inputs for learner/audiences in India and other developing countries. International agencies have also collaborated with distance education institutions such as IGNOU in training, skill development and competency enhancement of teachers and trainers through the distance mode. Further, serving the needs of disadvantaged groups should also be a major area of collaborative intervention.

Funding/Generation of Resources

Government contribution towards the conventional system of education is as much as 95% of the outlay but, in the new economic order and new knowledge era, institutions of higher learning in our country have been facing a resource crunch and hence are encouraged to generate resources. Efforts however to accumulate funds further have not succeeded, by and large, to an appreciable level. Whereas the conventional institutions/universities have already begun to hike the students fees, the ODE system - which is mandated to cater to the educational demands of common man, economically weaker sections, deprived and disadvantaged groups - does not find it justifiable as the fee structure of most programmes have already reached the threshold level of the paying capacity of students/learners community targeted. Otherwise the Open and Distance Education (ODE) System may become constrained in providing education to a large group of learners in the country. Hence funds from the Govt. would be required for fulfilling the above mandate and also for entering into new dimensions of activities and responsibilities. It is worth mentioning that distance education is cost effective, and has the capacity to enrol more students as it is not restricted by the structures of the conventional system. In the 10th plan keeping in view the merit of enrolling more students from the disadvantaged sections, O & DE would have to be appropriately funded worked out as a proportion of the funds being made available to the conventional system.

(iii) Approach Towards Developing Research Institutions

There has been a phenomenal expansion in social science research in the post-independence period. While this growth has been most significant in the university system, there has been also a significant growth of research institutes outside this system, stretching the entire gamut from market research bodies to co-coordinating research bodies such as the ICSSR, ICHR, ICPR, IIAS and the NCRI.

In the University system where teaching and research go hand in hand in the production of knowledge, there has been in the main, over the years, a two-fold strategy. One has been to go in for institution building in the shape of inter-university centres, both

the natural and social sciences, where further research could be done and the results ereof availed of by the university system. Examples of these are the Inter-University entres, such as, the Nuclear Science Centre at Delhi, the Advanced Astrophysics Centre Pune, and the IUC for Social Sciences at the IIAS, Shimla and such others. The other ırm of institution building has been to go in for research in identified Departments of xcellence through the Special Assistance Programmes (SAP). The Centres for dvanced Studies, the Departments for Special Assistance and the Departments for esearch Studies would fall into this cluster. The various Regional Instrumentation entres would also be part of the institution building exercise along with programmes ıch as COSIST and COSSHIP.

The other part has been to lay increasing stress on individual research by :warding those in the teaching faculty who would go in for generation of knowledge. At ıe very start, newly recruited teachers who have an M.Phil or Ph.D are being given extra ıcrements. The Career Advancement Scheme for teachers lays stress on research ıroughout their career. This tempo is sought to be maintained by providing for 'rofessors of Eminence at the other end of the spectrum. The university system would lso provide for those who might like to go in for pure research through Junior Research 'ellows and Senior Research Fellows as also by funding of major and minor research ırojects.

While all these activities would be maintained during the 10th Plan in universities, onscious of the fact that R&D expenditure has been somewhat on the low side, formal ertiary educational institutions would need to broaden their research base by linking up vith industry and other service bodies. This is not to contradict that much research is urely academic and is unlikely to lead to practicable implementation. This kind of esearch extends the human intellect and is fundamental to the culture of universities, but esearch that has the potential for practical application depends crucially on human and ndustry involvement. Industry provides the content for the research and the resources ecessary for reaching the frontiers. This applies to most areas of Science, Technology, Aedicine and Social Science. Collaboration could mean a certain decrease in the amount f academic freedom for university faculty presently (Team work, directed research, etc.)

nd would depend on the industry's willingness to share intellectual property rights and isseminate results but the end result would mean a win-win situation with more funds eing available to universities with faculty having a greater exposure to social needs and ıdustry being able to tap into long term, open-ended research activities of universities vhich continue to be the major source of a nation's intellectual output.

The other critical area where universities would need to focus on, as the nation pproaches universal literacy and universal elementary education, would be to link ackwards to research on pedagogy, classroom practices, etc, in the secondary and rimary education sectors. Education is intrinsically seamless and, therefore, university esearch has to look into its feeder streams. The harvest cannot only be better conceptual kills at the pre-tertiary stage but better attitudes (eg. On gender issues, values, etc.) and a reater motivation towards life-long learning.

Outside of the university system, the Department of Education in the Ministry of Human Research Development has been funding apex level research bodies in the social ciences such as the ICSSR, ICHR, ICPR, IIAS and the NCRI. The basic approach uring the 10th Plan Period would be to continue and increase the funding of these nstitutes so that they could play a more meaningful role in national development and the ap between the funding of the natural and the social sciences could be somewhat arrowed down.

iv) Approach for Promoting Value Education

- Value education at all the levels of our educational system must be based on a clear, unambiguous understanding of the relationship between moral life and human well-being. True well-being must be capable of being seen as essentially related to the life and practice of the virtues, e.g. honesty, courage, kindness, generosity, humility and so on.

- But this basic truth – if it is indeed so – seems to be belied by the reality of the socio-economic life around us. Our social and political arrangements seem to be such that they could easily influence the younger and the vulnerable towards the life of vice rather than virtue. Aspirations for wealth and power encouraged by our socio-political structure seem capable of being pursued only by developing attitudes opposite of qualities of character which we associate with the virtues. This is also projected in our electronic and film media with powerful effect.

- The challenge for value education, therefore, seems to be almost insuperably difficult. The first step might be to restore the central place of the virtues such as honesty, courage, justice, generosity etc. in the practice of education itself rather than making value education one element among others in the curricular and co-curricular programmes in our educational system. The role of the teacher here at each level of education is crucial and immensely demanding. The teacher must be seen as the embodiment of the essential relationship between the moral life and human well-being. The following could be necessary first steps in bringing the teacher to the centre stage of moral education:

    - A basic reorientation in our thinking about teacher training and a redefinition of the role of institutions, which impart such training.

    - Encouraging students in universities and colleges to debate among themselves and with teachers within the framework of formal education, raising questions relating to moral perplexities of daily life. Creative modes of communication and dialogue will have to be devised for such debates. The aim would also be to create, as it were, 'exemplary' institutions. The experiment in value education in Universities and in other centres of higher learning being carried out at present could be closely studied.

    - The UGC could consider setting up an Academic Council consisting of eminent educationists of the country, who could constantly study problems of curricula and examinations and this Council may, from time to time prepare reports that could highlight the status of research and frontier areas where such research could be focussed.

- The primary aim of moral education is, of course, to find ways of overcoming the despair and selfishness which modern civilisation generally seems to generate. On the one hand this is a task, as it has already been indicated, of enormous proportions and difficulty, and on the other hand, its success depends on the survival of humanity. The financial parameters of this task should, therefore, be treated as an essential investment for the future of humanity.

- Twenty-five universities from across the country may be selected for initiating Value Education Programmes. Each of these universities may begin with a Value Education Cell. The Cells will be responsible for organising all on-going Value Education Programmes in these universities. The programmes may include activities such as: (a) regular discussion among the members of faculty regarding the moral perplexities which are part of day-to-day life and how to come to terms with them; (b) regular interaction between members of

faculty and the student community on individual as well as collective moral issues; (c) lectures by eminent scholars; (d) seminars and conferences which will deal with issues relating to the integration of moral life into the practice of education itself.

(v) Approach to Develop Partnership in Education

Since education is holistic in character and has a focus on integrated development of the human being as a whole, there has to be a meaningful partnership in the educational process between teachers in institutions such as universities and colleges and the world at large. Outside the institutions all of whom have a role to play in moulding the students personality have to be roped in. Partnership in education therefore has the implied meaning that higher education must be community oriented and community based. Linkages with industry with the latter sharing a part of the manpower building costs could be a part of this community involvement.

(vi) Approach for Internationalization of Higher Education

The percentage of foreign students in a professional course should be determined on the basis of quality and cost parameters. Education offered should conform to international standards otherwise our achievements would be short lived. This also means that quality education must be provided by professionals and the cost should be recovered by the universities. Government should support universities by making capital grants and paying the full fees of students from weaker sections - but the rest of the financial needs of the universities must be met by internal generation of resources including charging of higher fees from foreign students. To be sure, not all universities would be willing or able to play this role, since they have too long been accustomed to functioning like the Departments of Government. To get them out of the present rut, special incentives should be considered. For example, universities which are willing to raise say 25-30% of their recurring expenditure from the fees of foreign students should be permitted to retain 10% of the collection towards a designated fund for updating equipment and facilities. The university should be within its rights to admit as many

foreign students as necessary to raise the target amount. For five years, Government should also consider making a matching grant towards their designated fund. This would progressively reduce the dependence of such a university on the Government. For the universities that accept the above scheme, the NAAC should set up a special and professional method for evaluation so that the foreign students who receive training in India are accepted as 'world class' on their return home. The evaluation should aim at ensuring not only high academic standards but also decent living conditions for the foreign students. If even 20 among the state and central universities join the scheme and are given the necessary autonomy, the entry of foreign students would contribute significantly to the quality and economics of professional education in India.

Deemed universities, which are rapidly growing in number and most of which receive no support from the Government should be encouraged to admit a higher percentage of foreign students. The present policy is too restrictive and does little to attract foreign students in larger numbers. If private enterprise is willing to set up world-class educational facilities in emerging areas such as IT or biotechnology, where the full cost will be recovered from the fees of foreign students they should be given encouragement such as is being provided for an industry FTZ.

Campus Abroad : The UGC has recently taken a welcome step by permitting deemed universities to set up campuses in other countries. This should be expanded into a new scheme for all universities who wish to 'export education'. The only condition should be that the university should have quality and competence in the chosen field and has the approval of the concerned government abroad. As an incentive for the universities in the public sector, their earnings abroad should not be deducted from the annual government grants for say, 5-10 years.

India Studies Programme : Concurrently with IT and other emerging areas, there is great and growing interest abroad in Indian's rich culture and tradition. A great deal needs to be done in promoting India studies by offering a variety of imaginative courses in Indian history, folk arts, music, temple architecture, philosophy, crafts etc. Many of these could be offered on the Internet and, if done well, could become very popular. The

Indian diaspora in US, Britain, West Indies, South Africa and other parts of the world would in particular, welcome such courses.

Role of Indian Embassies and AIU : A 'hot line' should be established between our missions abroad and the AIU, which should be strengthened appropriately for this purpose. Whenever our missions becomes aware of a given educational opportunity in a foreign country – whatever the specialty may be – they should get in touch with AIU on e-mail. AIU, in turn, should have a database from which it could identify the universities who would be interested and competent in following up the lead and establishing a unit abroad. The government should ensure that the university should, if so desired, have access to soft loans for the project. The AIU should have a business cell on payment basis to advise the university on the management aspects of the project.

(vii) Approach towards Networking

In this world of communication technology it is an imperative to utilise technology in education. Education demands the usage of Communication Technology. Computers and T.V. the twin electronic marvels shorten distances and an idea generated in one-corner spreads quickly to remote areas. Now the concept of Networking in Education is an imperative need. Networking means an ability to perform in a multitude of network configurations. The students of the same discipline can share their ideas through a networking system. Peer to peer networking refers to a type of network where every computer connected to the network can share its resources with the rest of the network.

In Dial-up networking Remote Access Services (RAS) are used to connect one computer to other computers or computer networks from remote locations.

The introduction of networking system is needed for the following reasons :

- In India there are regional imbalances in the development of certain disciplines. By establishing networking systems, a developed centre of a particular discipline can disseminate advanced knowledge to its remote corners. Moreover, the expertise and knowledge of an expert can be communicated instantly.

- Since advancement of technology is utilised in other areas like agriculture, health, industry etc, it is the need of the hour to utilise the benefits of technology for the enhancement of teaching and learning process across sectors.

- As the beneficiaries in education are on the increase, limited human resources cannot meet the need of all aspirants of education. So only networking can be a lasting solution to this problem.

ii) Approach for Mobilization of Resources

Since independence higher education has always been a publicly-funded sector[1]. s sprang from a sense of social responsibility as well as policy to invest in creation of nan resources. While doing this, a planned strategy, to pass on the financial burden to iety so as to make the system self-dependent, was never adopted. It is however essary now for higher education institutions to become financially more resilient ıough state funding of higher education would continue in an enhanced manner. The plan outlay on higher education was for instance more than three times than what was ıvided for in the 8th plan. In asking institutions to generate more internal resources ıdually, equity considerations would have to be kept in mind. A judicious mix of the lowing should address the resource crunch issue:

- Enhance fees in long-term time mode.[2]
- Gradually move towards full cost recovery in hostel and mess charges, electricity dues etc.
- Encourage universities to go for more self-financing[3] programs particularly in emerging inter-disciplinary areas.
- Encourage universities, and give them incentives for, attracting more foreign students and exporting of education.[4]

SA is always quoted as a good example of private funding in higher education. However, the public ding is there for students in the form of loan and universities get several grants from exchequer through emes. Of course, the industries, alumni and philanthropist are the major backbone of university funds. nost of the European universities government still is a major fund-giving agency.

ne cannot expect fees to be a major source of funding. Even in developed countries it brings maximum o 20 per cent of total revenue. We should plan certain hike spread over five years and later on link ly rise with education-cost-inflation index.

his is a misunderstood concept in Indian higher education system.. The approach of "self-financing" s not, and should not; propagate the concept of "commercialization" of higher education. It is an roach, where universities work out actual cost of "teaching" in an area of interest and work out "cost of ning", which is charged to students.

e universities should start programmes like "India Abroad" for foreign students. They can also launch hing programms in foreign countries by tying with local institutions.

- Encourage universities to create "corpus funds" by giving incentives.
- Create *"Bharat Shiksha Kosh"*[5] an independently managed financing structure, through :

1. Initial bulk investment by the Government of India (GoI).

2. Introduction of *"Gurudakshina"* tax, equivalent to first month's salary of freshly employed graduate, in private and public sector and transferring it to the *"Kosh"*.

3. Appeal to the public to contribute to *education* and giving them tax benefits.

The Tenth Plan should clearly initiate processes to raise resources by giving financial incentives to colleges and universities.

[5] Similar concept with different titles, higher education funding corporation, higher education funding bank and so on, has been in circulation for almost a decade or more. However, even though everybody is convinced about the need, never a decision has been taken at policy level to set up such an entity. With changed higher education scenario, we cannot afford to ignore it any more. What is needed is a change of mindset.

VII

PROPOSALS

Building High Capability Base

One of the challenges in tertiary education is to develop a larger capacity for enrolment of a larger number of students in higher education. Presently only 6 per cent of relevant age population is able to get entry in higher education. A country that intends to build higher capability base among its population should have at least 15 per cent of the relevant age group population enrolled in higher education. This percentage is viewed as the 'critical minimum' even though it is comparatively low. However, it would not be possible to achieve the level of 15 percent enrolment of the relevant age group in higher education as almost half of the students appearing for higher secondary examinations fail. Only those that pass out become eligible for higher education. Of this 22 per cent are left out due to non-availability of seats. However, there are more than two million persons (with 12 years of education without passing certificate) in the relevant age group who remain out of higher education every year. Thus one of the major points for consideration would be the social consequence of the neglect of the left outs. The system takes into account at present only those left-outs who for having less marks do not get admission into higher educational institutions. But when broadly defined, the left-outs are a vast majority, constituting 94% of the eligible cohort. Of these a good segment have failed to obtain certificates and there are many others who never went for the higher secondary stage for numerous reasons. To overlook this population may not bode well. The system must therefore, think of nurturing this segment into useful members of society by providing them with marketable and life-skills. The cost for this provision may be much less than making provision for the defenses against the potential threat to the peace of society, which they pose. The adage "prevention is better than cure" applies in this case more aptly than elsewhere. The following strategies could be considered :

Enhancement of Existing Capacity Selectively : Capacity needs to be expanded selectively in areas where education facilities are inadequate, particularly underserved areas. Areas considered underserved are hilly, tribal, backward and inaccessible regions and the groups underserved

are such as SC/ST and OBC, women and those physically challenged. This is particularly so as it is felt that advantages of expansion are often appropriated by elite groups. Schemes of expansion of capacity for such areas/regions and groups may, therefore, be appropriate. The North-eastern region and several blocks in the northern region do not have a single college. Funds allocated to States for achieving expansion should not be diverted for any other purpose.

Encouraging Private Initiative in Higher Education : Presently Tamil Nadu, Andhra Pradesh and Karnataka have encouraged private initiatives in higher education. In Andhra Pradesh as much as 30 percent of total enrollment in higher education is in private self-financing institutions. Allowing private initiative in higher education has helped expansion of marketable skills oriented education. It is likely that enrollment might shift from government and private aided colleges to private self-financing colleges which are providing marketable skills. In order to avoid this, reforms in government and government funded institutions have to be simultaneously attempted. It is suggested that private system should assist the public institutions and not replace it. The role of private institutions should be regulated and monitored carefully. Private initiative may help achieve the need of expansion partially.

Distance and Virtual Universities : The new mode of delivery of education, namely, the distance and virtual university mode has broken down physical barriers and has the potential to provide opportunities for higher education to persons located in any part of the country. This mode has immense capacity to enroll students. Part of the need of expansion of higher education facilities could be met by this mode of education.

Multiple Use of Existing Infrastructure : The existing infrastructure of colleges and universities are used only for less than one fourth to half of their capacities. This is owing to the structure of education as also of prohibition on use of infrastructure by any other organization or the same organization for other than a defined institutional purpose. This, in fact, is underutilization of existing resources. The existing infrastructure of 234 university institutions, 11 thousand colleges should be used for academic purposes for any amount of time in a day or week by the same or any other institution on payment of reasonable rent. The institutions may, also, be developed for multiple use of infrastructure. This should facilitate involving those left out students with higher secondary pass out or those with 12 years of education but without passing out certificate. The multiple use of infrastructure should be for programmes of varied duration, but the focus should be to equip the youth with varied skills that are needed in jobs and in life. It is estimated that all those with 12 years of education but without examination

certificates can be provided education and training in different skills through the use of the existing infrastructure. Such training should allow vertical mobility of students. This in turn may help achieving the vision of 15 per cent enrollment in relevant age group population. Much more than this, it would develop capability of these left outs.

The other aspect of expansion is that it need not follow the traditional pat.: of degree or diploma programs. It has to be necessarily modular, flexible and provide for life skills, job skills and knowledge skills oriented for different durations and in different areas. The response on expansion has to be, therefore, different from the past.

Data Base Management System

One of the major problems encountered in planning and projecting the development of capability is lack of a proper and reliable data base. Data base management is one the weakest links in planning the management of the system of education including higher education. It is therefore essential that proper computerized data base management system is developed. This system should not only collect, collate, process and manage and then be made easily available (preferably on network) within the country, but the data base be so developed as to be internationally comparable. The proposal is therefore, to set up a date base management system for higher education under this plan. The OECD pattern can be considered for adoption/adaptation in this regard.

Refocusing on Colleges

In the early phase of development of higher education the focus was on colleges. Some of the universities were born out of the colleges. After the mid sixties emphasis started shifting from colleges to universities. In the course of time colleges were marginalized. Allocation of funds by the University Grants Commission was more on universities than colleges, even though colleges account for 86 percent of the total enrollment in higher education. The per student development grant in universities is Rs.2457/- as compared to Rs.197/- in colleges. Most of the undergraduate education and more than half of the postgraduate education is being carried out in the colleges. Yet when it comes to considering the development programmes, colleges receive a raw deal.

The question of high capability development among the youth of the country can not be addressed unless our attention is refocused on the colleges. There are 11 thousand colleges in the country, of these only five thousand receive marginal assistance from the UGC. The rest five thousand colleges have to fend for themselves. At times the sheer number of colleges blocks the thinking of decision makers about the development of colleges and attention gets focused on the universities. But closing one's eyes to the ground reality can not change anything and the quality of human resources can not be developed unless the question of development of quality of education in colleges is addressed. Concern for quality of education in colleges has become more serious as there appears to be a bottleneck in the expansion of the capacity to achieve the envisaged coverage of 15 per cent of the relevant age group. Whereas the capacity has to expand, the quality of those coming out of higher education has to be high. And this will be possible only when colleges are strengthened. The proposal, therefore, is to refocus on the colleges in the following way :

- All the colleges should be made eligible for development grant for improving the quality of undergraduate education. The concept of permanent affiliation has to reconsidered as it varies from state to state and from university to university. Those having relaxed conditions benefit from UGC grants and those that have to meet strict conditions suffer. UGC funding should be available to all colleges. The funding should be based on quality parameters.

- There was a proposal to support about 100 colleges in backward districts. Detailed plan proposals from these colleges were also prepared, but non inclusion of this aspect in the 9th plan and due to shortage of funds the expected support was not provided to the colleges. It is proposed that 100 colleges located in the backward districts of the country that have already been identified and development plans prepared by them may be considered for funding during this plan. These colleges would work as model colleges in the district.

- There is need to evolve a clear policy for providing life-skills and market-skills on a massive scale within a flexible framework. Regular programs of studies should be reformed to introduce flexibility and diversification. Dual degree programs should be also introduced.

- In order to provide life skills, job skills and communication and knowledge skills the concept of ***community colleges*** should be introduced at the undergraduate stage by using existing infrastructure as suggested above under

the title of 'Multiple use of existing infrastructure'. The colleges should enroll all left out students having 10 to 12 years of education.

- The promotion of autonomous colleges and their delinking with universities is the only answer for introducing flexibility, relevance and quality in higher education. Any more delay in this regard may result in damage to the system.

- Colleges are academically more viable and administratively more manageable units and also most economical in terms of costs. Yet this unit has not been considered fit enough to be recognized as degree giving institutions, like 'deemed to be university' and the like. It is necessary to consider this unit as an important unit for reforms and improvement of quality in higher education. Some the oldest and best colleges of the country may be recognized as degree awarding institutions. This approach besides reducing large administrative cost will help carrying out required reforms in programs of studies and students evaluation.

Development of Information & Communication Technology Capability

One of the major revolutions that has influenced the higher education systems production and distribution is the advent of ICT and its great potential in future. The revolution, besides requiring professional education at different levels also expects every one to operate through this technology. Thus there are three fold implications of this revolution :

(a) development of hard and software engineers of ICT;

(b) development of R&D in ICT;

(c) preparing large number of ICT enablers and users of ICT; and

(d) equipping every university and college with the minimum critical level of IT infrastructure.

Status of ICT in Universities and Colleges

The analysis of data on IT capability and use of IT in planning and management in universities reveals a dismal picture. Out of 180 general universities contacted only 34 responded on this aspect. This indicates that others have very little to share. Of the 34, five did not have any computer centre. With regard to ratio of computer professionals to total faculty 10 universities did not share any information. Of those who shared this

information indicated the range of 1:10 to 1:100 The greater number was in the range of 1:25 and 1:50 and above. For 14 universities computer to user ratio worked to 1:25 for another 6 universities it was above1:50 and for 2 universities it was above 1:100. 12 universities did not share any information on this aspect. With regard to internet facilities 11 did not share any information on this aspect. 20 universities indicated that they had this facility for teachers only. Only 13 universities had these facilities for students. Only six universities claimed to have provided Internet facilities to all teachers. The rest have ratios ranging from 1:50 to 1:500. The picture of IT capability among the colleges was not readily available. This needs to be assessed. But the general impression is that not more than 2000 colleges have more than 2-3 computers. Internet facilities among the colleges would be even poorer.

The scenario being such that it may be pertinent to initiate a scheme of development of information and communication technology among the universities and colleges during this plan so that by the end of next plan the country is fully equipped to grapple with this technology in a competitive manner internationally. It is proposed that the following may be implemented :

- Providing ICT infrastructure worth Rs.5,00,000 to each of 5000 colleges in the country, particularly where no such infrastructure has been created;
- Provide training to at least one hundred thousand teachers in higher education within this plan for the use of IT for teaching and learning and for information retrieval and information uploading. It could be done in existing academic staff colleges @ Rs.10000/- per teacher;
- Provide training to 20 thousand administrative staff in academic and administrative staff colleges @ Rs.10000/- per staff;
- Provide ICT infrastructure to at least 200 universities @ 5 million; and
- Develop infrastructure and human resources in hardware and software aspects as indicated by the IT task force.

Response to WTO and Internationalization of Higher Education

As mentioned earlier, the paradigm of development has changed. International arrangements in trade in commodities, services and intellectual property rights are occupying greater importance. Some of the State policies and rules have to be modified to suit international arrangements in this regard. In order to respond to this, two steps would be essential :

- Analysis and research on WTO by social scientists;
- Preparation of institutions of higher education to face international competition in trade in education services;
- Development of internationally competitive knowledge content, research output and human resources; and
- Proposals to respond to the above aspect by creating new structures and allocation of funds to facilitate universities and colleges to meet this challenge.

Excellence, Relevance, Flexibility, Modularization and Credit System

Several programs pertaining to excellence and relevance were initiated during the 9th plan. These programs may be continued with additional support. However, programs for initiating flexibility of short-term courses along with regular degree programs, modularization of courses and introduction of credit system would be necessary to make the system diversified for developing improved capabilities among graduates. Rate of wastage would also need to be reduced and relatively larger proportion have to be in the postgraduate and research programs to respond to future R & D needs. Proposal for allocation of funds for on-going and additional programs have, therefore, been made.

Developing Work Environment

The academic environment of common rooms, where peer groups once used to interact on academic matters have degenerated into gossip houses unrelated to academic matters. With the increase in number of teachers and common rooms remaining the same

in size, it has made many teachers to come to college only for lectures and go back home. Students' interaction with their teachers is the least.

As early as 1983 the National Commission on Teachers-II in higher education had recommended providing office space for teachers in universities and colleges. It was mentioned that when an office clerk is appointed a table and chair is identified, whereas no such place is identified for the teachers. As a response to this, some change has taken place in a good number of universities. Yet a large number of colleges and some universities still have the same problem. As a step to improve the work culture and to ensure the presence of the teacher in the college for a longer period in time, a cabin (office space) may be provided to each teacher in the universities and colleges. The present common rooms may be converted to Reading Rooms for teachers and students. A proposal has been made for provision of a cabin for every teacher in the system. Financial estimates for the same have been indicated.

Inter-University Centers in Social Sciences

Under quality improvement emphasis had been laid on science subjects and interuniversity centers have been set up during the 8th and 9th plans. An Inter-university Centre on quality improvement in the social sciences is however lacking. With globalization and the changing economic and social scenario it is important to develop a quality research base to prepare faculty to study the socio-economic-political impact of these changes so as to ensure development with a humane face. A proposals has been made for setting up of an inter-university centre in social sciences.

Inter-University Centre of Sciences

There are three centers focusing on Nuclear Science, Astro-physics and Astronomy and other facilities in science respectively. There is a need for strengthening these by setting-up an inter-university center for science as a multi-disciplinary center which will take into account strengthening of teaching and research in inter-disciplinary subjects in the sciences and provide training to teachers in other inter-university centers of sciences.

Universities of Excellence

As a part of promoting excellence in universities, besides various programmes of SAP (Special Assistance Programmes) there is need to strengthen some universities so that they to become centers of excellence particularly in the context of emerging fields of study and research. It is proposed to identify certain universities as centers of excellence and provide them incentives/grants so that they can become outstanding universities in the country. This incentive will be based on certain criteria/performance and their potential to strengthen teaching and research in newer and inter-disciplinary areas of teaching and research.

Strengthening Universities in Backward Districts

A proposal has also been made for strengthening universities and colleges in backward regions as a part of achieving the twin objectives of equity and excellence. Certain universities in backward areas would be identified and financial support would be provided to them so that they can improve their quality and at the same time provide access to students in backward districts. A similar scheme for promoting colleges in backward areas has been proposed so that colleges can become centers of quality education at the district level and become model centers in helping other colleges in the area.

Quality Assurance and National Qualifications Framework

Quality regulation through recognition or approval has to be replaced by quality assessment and introduction of a National Qualifications Framework (NQF). Society in general and the labour market would be more concerned with learning outcomes than by mere inputs. Besides, old input parameters may not necessarily ensure quality. Therefore quality assessment would need to be strengthened and the concept of qualifications framework based on quality of learning outcomes and vertical and horizontal mobility has to be introduced. This would not only ensure quality of outcome of the formal system but the quality of all educational providers as they would also be required to follow and be assessed on national standards which would also be internationally comparable.

Proposal for NQF and strengthening of National Assessment and Accreditation Council has been made in this plan.

Academic and Administrative Staff Development Programs

The quality of human resources engaged in academic and administration greatly depends on the continuous renewal and training of personnel. The scheme of academic staff development programs was initiated during the VIII plan and continued in the 9th plan. This has provided an opportunity of renewal to a large number of teachers in higher education. However institutions have worked with poor infrastructure and ad-hoc staff arrangements. These institutions therefore need to be given suitable structure and regular staff and permanent standing. These institutions should also be used for administrative staff development programs with some additional support. This would reduce per participant cost and provide renewal training of both academic and administrative staff in universities and colleges. A proposal has been made for the same and financial allocation for this has been indicated in this plan.

Centre for Coordination, Research and Training in Planning and Management of Higher Education

There was a proposal in the 8th five year plan to set up a national level professional body for the planning and management of higher education. The proposal was not implemented, though its need is felt urgently to provide information and an analytical base for coordination, policy formulation, impact analysis of implementation of programs and investment for development of higher education. A proposal has been made to set up an institution to strengthen reforms in planning and management of higher education.

Open and Distance Education System

The proposals pertaining to open and distance education pertain to :

i) Gyan Darshan (TV Channel) and Gyan Vani (Radio Broadcast);
ii) System development through national networking and open distance education institutions;

iii) Special measures for development of education among disadvantaged groups and regions;
iv) Development of open universities and Correspondence Courses Institutions (CCI); and
v) Development and strengthening the Indira Gandhi National Open University.

velopment of Research Institutions

(i) *Indian Council of Social Science Research (ICSSR)*

The Indian Council of Social Science Research would be called upon to play a pivotal role in co-ordinating social science research through its chain of 27 institutes as also by linking up with universities with strong social science departments. Research in terms of evaluation of outreach, comparative cost/benefit analysis of delivery systems, short and long term impact assessment etc. are vital to the vast array of governmental development interventions in education, rural development, health, water supply, agriculture, transportation, etc, sectors. The ICSSR institutions located as they are in the States, with, in most cases, funding done on a fifty-fifty basis between the Central and State Governments, are ideally suited for undertaking decentralized research meeting the requirements of Local, State and the Central Government in a federal polity. The ICSSR system also has the advantage of offering a multi-disciplinary faculty under one single umbrella. The R&D needs of tomorrow would increasingly require such an approach. The funding of ICSSR has markedly gone up during the 9th Plan period, from 7.65 crores during 97-98 to 12.90 crores in 2001-2002. During the 10th Plan Period, keeping in view the broad mandate of social science research, the outlay for ICSSR is proposed to be trebled to that provided during the 9th Plan. The ICSSR would also strengthen its links with multilateral and bilateral bodies to strengthen its social science base. This would include institutions such as UNESCO, WIDER, etc.

(ii) *ICHR and IIAS*

The ICHR and the IIAS would continue to broaden the base of our understanding of the Indian civilization in tandem with the PHISPC. There would be networking with other research institutions, particularly universities in this regard. There would be mapping of tradition and change as also a tracing of the continuous Indian narrative in the work of their institutions. Since heritage is both tangible and intangible, there would also be studies of ethical precepts and value systems. The PHISPC for instance, would expand its present project activities so as to include besides a history of science, philosophy and culture, studies on the

evolution of consciousness and values as well. The budgets of the ICHR, IIAS and PHISPC would also be substantially enhanced.

(iii) ***National Council of Rural Institutes (NCRI)***

The National Council of Rural Institutes, which was set up in1995 to promote, inter-alia, rural education, modeled on Gandhian precepts has not been able to make much headway. During the 10th Plan, this Council will be strengthened to coordinate Gandhian education across all sectors. The emphasis that Gandhi laid on the vocationalisation of education, on austerity, on values and on the institution of the community are all critical issues in Indian education and society and the Council would focus on these. A manifold increase in the size of the budget for the NCRI for the 10th Plan is envisaged consequent on the physical programmes that would spring from the above redefinition.

VIII

MECHANISM OF IMPLEMENTATION OF TENTH PLAN

Vision, thrust areas, approaches, strategies and the proposals as outlined above are posed to be implemented through several programmes and schemes, by the University nts Commission, Distance Education Council and by other higher education itutions respectively. The schemes and programmes proposed to be implemented by UGC are categorized in the following major areas namely :

1. Development of Universities and Colleges
2. Enhancing Access and Equity
3. Promotion of Relevance
4. Promotion of Quality and Excellence
5. Improvement in Management and Efficiency of Higher Education
6. Programme to Strengthen Scientific Research
7. Programme to Strengthen Engineering and Technology Development

As plans have to have an operational mechanism, these plans are proposed to be rationalised through as many as 91 schemes. Details of the continuing as well as new emes are given as below under above major areas. The justification for each of the emes is given in Annexure 1.

1. Development of Universities and Colleges

- Central Universities
- New Central Universities
- Deemed Universities
- State Universities
- Development of Delhi Colleges
- Development of State Colleges:
- One time grants to universities for books and equipment

- Promotion of Structural Convergence of conventional and open education /Correspondence Courses
- One time grants to colleges for books and equipment
- Autonomous Colleges

2. Enhancing Access and Equity

- Women's Hostel
- Day Care Centers
- Infrastructure for women students/teachers
- Scholarship for women in professional courses
- Women study center
- Family Studies
- Scheme for SC/STs/SC&ST Cell
- Remedial Coaching for admission/NET/Services
- Facilities for Disadvantaged
- Remedial Coaching Classes for Minority groups
- Visiting teachers from Kashmir/NE Region
- Development assistance for colleges in Backward Areas
- Development assistance for universities in Backward Areas
- Adult & Continuing Education
- Population Education
- Counselling Centers
- Special schemes for university/colleges in North East and Kashmir
- Special development grants for colleges for strengthening infrastructure including improvement in work environment of colleges
- Special development grants to universities for strengthening infrastructure including improvement in work environment of colleges
- Special support activities for SC/ST/Minorities/Women and other disadvantaged groups including the physically disabled in computers communications and bio-technology Studies

3. Promotion of Relevance

- Career Orientation of Courses
- Incentive Schemes for implementing reforms
- Emerging areas and incentive programs including promotion of Centers in Peace Management, Conflict Resolution, WTO related Studies in Law, Social Sciences and Humanities
- Physical Education and Sports
- Promotion of Yoga education

- Academic Staff Colleges; Support for ongoing programs as well development of infrastructure for administrative staff development
- Subject Panels/CDC
- Value Education/Human Rights Education
- New schemes to be initiated by universities
- Traditional Languages/Sanskrit Speaking Centers/Karmkand
- History of Science and Ancient Heritage/Vedic Astrology/Yogic Science/Human Consiousness/Applied Philosophy

4. Promotion of Quality and Excellence

- SAP/DRS/DSA/CAS in Humanities and Social Sciences
- Internal Quality Assurance Cell in universities and colleges
- Development of teaching courseware, Multi-media content material and Courseware repository development/University level text books
- Research Projects in Humanities & Social Sciences/Research Funding Council
- COHSSIP
- Travel Grants
- Unassigned Grants
- Seminars & Conferences
- NET
- Research Award
- Utilization of services of retired teachers/Emeritus Fellow/Visiting Professor
- Area Studies
- Networking of universities/UGC Net : Intranet and Internet Connectivity/IT Orientation of Faculty
- Modernization of Teaching/Digital Repository of Research and Teaching Materials
- Faculty Improvement Programs
- Reimbursement of expenses to non-university institutes
- Raj Bhasha
- Promotion of Excellence in universities including development of IT infrastructure and support and IT Orientation
- National Lecturers
- Adjunct Professors (Interaction with Business)
- Promotion of Excellence in Colleges including development of IT infrastructure and support and IT Orientation
- Institutionalization of Teaching & Research in Inter-disciplinary areas
- Computers and Internet Literacy for Teachers & Administrators

- Assistance for promotion of Export of Higher Education
- International Cooperation/Cultural and Academic Exchange Programs
- Inter university centers including establishment of IUCs in Social Sciences, Humanities and WTO related Studies
- Development Grants for National Facilities

5. Improvement in Management and Efficiency of Higher Education

- Incentives for Resource Mobilization (25% UGC Share)
- Training of Administrators
- Professional Management of Universities
- UGC Building & Campus Development including Regional Offices
- UGC Computerization
- Training of UGC Administrators
- Creation of Reliable Education Data Base
- Policy Research Cell
- Planning & Development Division
- Publication of UGC Documents
- College Development Council
- State Council for Higher Education
- Bharat Shiksha Kosh

6. Program to Strengthen Scientific Research

- COSIST
- SAP/DRS/DSA/CAS in Science including emerging areas research in Genomes, Bio-Technology, Bio-Medicine etc
- Research Projects in Science
- Advanced Centers for Science Education & Research
- Removal of Obsolescence
- COSIP
- USIC

7. Engineering and Technology (E&T)

- Grants to Institutes of Technology in Central Universities
- Grants to Management Institutions in Universities
- Computer Education
- SAP/DRS/DSA/CAS in E&T
- Research Projects in E&T
- Grants to women universities in Technical Courses

8. Open and Distance Education System

- Gyan Darshan & Gyan Vani
- System Development
- Special Meausres for Disadvantaged Groups
- Support to SOUs and DEIs
- IGNOU

Detailed justification of these scheme are given in Annexure-I.

9. Research Institutions

- ICSSR
- ICHR and IIAS
- NCRI
- ICPR
- Assistance to non-government institutions in the area of higher education.

IX

FINANCIAL ESTIMATES

The financial estimates for implementation of new proposals as well as schemes and programs to be continued from the 9th Five Year Plan are given in Table 3. The projected funds for the 10th Five Year Plan for Higher Education in respect of new proposals to be funded through the UGC is estimated at Rs. 1189 crores (see Table 4). For ongoing schemes it is estimated at Rs. 6433 crores. The aggregated figure works out as Rs. 7622 crores. For the Open and Distance Education System the amount is estimated at Rs. 890 crores. For Other Sectors and Research Institutions the amount estimated is Rs. 200 crores. All put together means Rs. 8712 crores for the Higher Education Sector as a whole vis –a- vis Rs.2500 crores during the 9th plan period. Scheme wise details are given in Table 5.

Table 3 : Sector Wise Proposed Allocations (Rs. in Crores)

Sector	Sectors	9th Plan Expenditure (Estimated)	10th Plan Proposal	% Increase	% Distribution 9th Plan	% Distribution 10th Plan
1	Development of Universities & Colleges	1171.33	2631	125%	53%	35%
2	Enhancing Access & Equity	84.21	700	731%	4%	9%
3	Promotion of Relevance	244.24	960	293%	11%	13%
4	Promotion of Quality and Excellence	402.13	2054	411%	18%	27%
5	Improvement in Management & Efficiency of Higher Education	36.74	257	599%	2%	3%
6	Program to Strengthen Scientific Research	141.18	680	382%	6%	9%
7	Engineering and Technology	127.28	340	167%	6%	4%
	Total through (UGC)	**2207.10**	**7622**	**245%**	**100%**	**100%**
8	**Total through (DES)**		**890**			
9	**Total through Other Agencies**		**200**			
	Aggregate Requirements for the 10th Plan		**8712**			

It would be seen that in the formal (UGC) sector the accent is on quality and relevance of higher education which are the key areas in meeting the challenges of the future. The new schemes and funding requirements are shown in Table 4.

Table 4 : New Schemes proposed Allocation through UGC (Rs. in Crores)

Schemes/Sub Schemes	10th Plan Proposal
Promotion of Excellence in Colleges including development of IT infrastructure and support and IT Orientation	220.00
Special development grants for colleges for strengthening infrastructure including improvement in work environment of colleges	200.00
Advanced Centers for Science Education & Research	150.00
Development assistance for colleges in Backward Areas	100.00
Development assistance for universities in Backward Areas	100.00
Grants for Promotion of Export of Higher Education	100.00
Special development grants to universities for strengthening infrastructure including improvement in work environment of colleges	60.00
Internal Quality Assurance Cell in universities and colleges	40.00
Institutionalization of Teaching & Research in Inter-disciplinary areas	30.00
Family Studies	20.00
Professional Management of Universities	20.00
Special support activities for SC/ST/Minorities/Women and Disadvantaged groups in computers communications and Bio-technology Studies	10.00
Computers and Internet Literacy for Teachers & Administrators	10.00
Development Grants for National Facilities	10.00
Policy Research Cell	10.00
Creation of Education Data Base	5.00
Scholarship for women in professional courses	2.00
Training of University Administrators	2.00
Bharat Shiksha Kosh	**100.00**
Total	**1189.00**

It would be clear that new schemes will focus on revamping Undergraduate and Postgraduate Education, Meet the Challenge of Access and Equity, Information Technology (IT) and Challenges of International Competition.

Proposed allocation for each of the above scheme is given in Table 5.

Table 5 : Old Schemes Proposed Allocation (Rs. in Crores)

Sector	Schemes/Sub Schemes	9th Plan Expenditure	10th Plan Proposal
1	**Development of Universities and Colleges**		
1.1	Central Universities	276.20	421.00
1.2	New Central Universities	66.14	100.00
1.3	Deemed Universities	58.90	100.00
1.4	State Universities	341.14	650.00
1.5	Development of Delhi Colleges	14.25	50.00
1.6	Development of State Colleges:	338.91	1000.00
1.7	One time grants to universities for books and equipment	46.54	80.00
1.8	Promotion of Structural Convergence of conventional and open education approach/Correspondence Courses	0.02	5.00
1.9	One time grants to colleges for books and equipment	12.46	25.00
1.10	Autonomous Colleges	16.77	200.00
	Total Sector 1	**1171.33**	**2631.00**

Contd...

2	**Enhancing Access and Equity**	**9th Plan Expdt.**	**10th Plan Proposal**
2.1	Women's Hostel	34.90	50.00
2.2	Day Care Centers	1.12	10.00
2.3	Infrastructure for women students/teachers	1.00	10.00
2.4*	Scholarship for women in professional courses		2.00
2.5	Women's Study Centers	4.48	20.00
2.6*	Family Studies		20.00
2.7	Scheme for SC/STs/SC&ST Cell	8.50	20.00
2.8	Remedial Coaching for admission/NET/Services	13.63	15.00
2.9	Facilities for Disadvantaged	5.09	20.00
2.10	Remedial Coaching Classes for Minority groups	0.03	10.00
2.11	Visiting teachers from Kashmir/NE Region	0.92	5.00
2.12*	Development assistance for colleges in Backward Areas		100.00
2.13*	Development assistance for universities in Backward Areas		100.00
2.14	Adult & Continuing Education	10.67	30.00
2.15	Population Education	2.26	3.00
2.16	Counselling Centers	0.50	10.00
2.17	Special schemes for univ/colleges in North East and Kashmir	1.11	5.00
2.18*	Special development grants for colleges for strengthening infrastructure including improvement in work environment		200.00
2.19*	Special development grants to universities for strengthening infrastructure including improvement in work environment of		60.00
2.20*	Special support activities for SC/ST/Minorities/Women and Disadvantaged groups in computers communications and Bio-technology Studies		10.00
	Total Sector 2	**84.21**	**700.00**

Contd...

3	**Promotion of Relevance**	**9th Plan Expdt.**	**10th Plan Proposal**
3.1	Career Orientation of Courses	108.71	215.00
3.2	Incentive Schemes for implementing reforms	0.57	10.00
3.3	Emerging areas and incentive programs including promotion of centers in Peace Management, Conflict Resolution, WTO related Studies in Law, Social Sciences and Humanities	20.64	240.00
3.4	Physical Education and Sports	1.08	60.00
3.5	Promotion of Yoga education and practice	1.77	30.00
3.6	Academic Staff College; Support for ongoing programs as well development of infrastructure for administrative staff development	75.57	220.00
3.7	Subject Panels/CDC	0.77	35.00
3.8	Value Education/Human Rights Education	4.00	10.00
3.9	New schemes to be initiated by universities	2.84	70.00
3.10	Traditional Languages/Sanskrit Speaking Center/Karmkand	22.00	50.00
3.11	History of Science and Ancient Heritage/Vedic Astrology/Yogic Science/Human Consiousness/Applied Philosophy	6.30	20.00
	Total Sector 3	**244.24**	**960.00**
4	**Promotion of Quality and Excellence**		
4.1	SAP/DRS/DSA/CAS in Humanities and Social Sciences	24.08	100.00
4.2*	Internal Quality Assurance Cell in universities and colleges		40.00
4.3	Development of teaching courseware, Multi-media content material and Courseware repository development/University level text books	0.14	40.00
4.4	Research Projects in Humanities & Social Sciences/Research Funding Council	42.54	100.00
4.5	COHSSIP	6.02	10.00

Contd...

		9th Plan Expdt.	10th Plan Proposal
4.6	Travel Grants	3.45	15.00
4.7	Unassigned Grants	26.62	60.00
4.8	Seminars & Conferences	8.10	15.00
4.9	NET	14.47	15.00
4.10	Research Award	15.32	50.00
4.11	Utilization of services of retired teachers/Emeritus Fellow/Visiting Professor	7.71	50.00
4.12	Area Studies	2.92	10.00
4.13	Networking of universities/UGC Net:Intranet and Internet Connectivity/IT Orientation of Faculty	23.02	155.00
4.14	Modernization of Teaching/Digital Repository of Research and Teaching Materials	1.00	48.00
4.15	Faculty Improvement Programs	14.73	105.00
4.16	Reimbursement of expenses to non-university institute	2.70	5.00
4.17	Raj Bhasha	0.52	1.00
4.18	Promotion of Excellence in universities including development of IT infrastructure and support and IT Orientation	55.00	500.00
4.19	National Lecturer	1.00	50.00
4.20	Adjunct Professor(Interaction with Business)	1.00	5.00
4.21*	Promotion of Excellence in Colleges including development of IT infrastructure and support and IT Orientation		220.00
4.22*	Institutionalization of Teaching & Research in Inter-disciplinary areas		30.00
4.23*	Computers and Internet Literacy for Teachers & Administrators		10.00
4.24*	Grants for Promotion of Export of Higher Education		100.00
4.25	International Cooperation/Cultural and Academic Exchange Programs	3.54	10.00

Contd...

		9th Plan Expdt.	10th Plan Proposal
4.26	Inter university centers including establishment of IUCs in Social Science, Humanities and WTO related Studies	148.25	300.00
4.27	Development Grants for National Facilities		10.00
	Total Sector 4	**402.13**	**2054.00**
5	**Improvement in Management & Efficiency of Higher Education**		
5.1	Incentives for Resource Mobilization (25% UGC Share)	21.39	50.00
5.2	Training of Administrators	0.00	20.00
5.3*	Professional Management of Universities		20.00
5.4	UGC Building & Campus Development including Regional Offices	12.37	15.00
5.5	UGC Computerization	1.95	3.00
5.6*	Training of UGC Administrators		2.00
5.7*	Creation of Education Data Base		5.00
5.8*	Policy Research Cell		10.00
5.9	Planning & Development Division	0.52	5.00
5.10	Publication of UGC Documents	0.51	5.00
5.11*	College Development Council		2.00
5.12*	State Council for Higher Education		20.00
5.13*	Bharat Shiksha Kosh		100.00
	Total Sector 5	**36.74**	**257.00**

Contd...

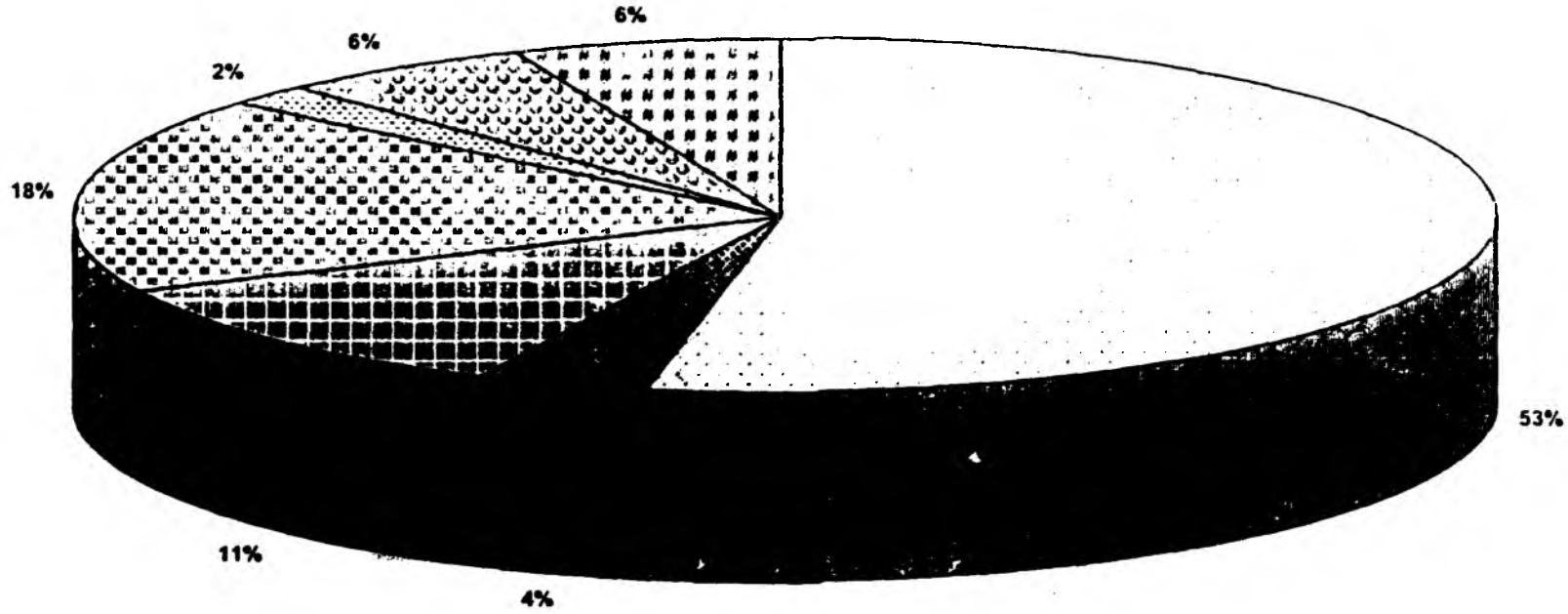
		9th Plan Expdt.	10th Plan Proposal
6	**Program to Strengthen Scientific Research**		
6.1	COSIST	32.78	60.00
6.2	SAP/DRS/DSA/CAS in Science including emerging area research in Genome, Bio Technology, Bio Medic etc	63.81	140.00
6.3	Research Projects in Science	36.63	150.00
6.4*	Advanced Centers for Science Education & Research		150.00
6.5	Removal of Obsolesence	1.50	100.00
6.6	COSIP	3.94	50.00
6.7	USIC	2.52	30.00
	Total Sector 6	**141.18**	**680.00**
7	**Engineering and Technology**		
7.1	Grants to Institute of Technology in Central Universities	40.94	90.00
7.2	Grants to Management Institutions in Universities	10.24	60.00
7.3	Computer Education	46.87	100.00
7.4	SAP/DRS/DSA/CAS in E&T	16.51	50.00
7.5	Research Projects in E&T	8.87	20.00
7.6	Grants to women universities in Technical Courses	3.85	20.00
	Total Sector 7	**127.28**	**340.00**
	Total All Sectors (through University Grants Commission)	**2207.10**	**7622.00**

Contd...

8.	**Distance and Open Education Systems**	**9th Plan Expdt. (Estimated)**	**10th Plan Proposal**
8.1	Gyan Darshan & Gyan Vani	209 crores	150.00
8.2	System Development		150.00
8.3	Special Measures for Disadvantaged Group		90.00
8.4	Support to SOUs & DEIs		200.00
8.5	IGNOU		300.00
	Total Sector 8 (Through Distance Education Systems)		**890.00**
9.	**Research and Other Agencies**		**200.00**
	Aggregate Requirements for the 10th Plan		**8712.00**

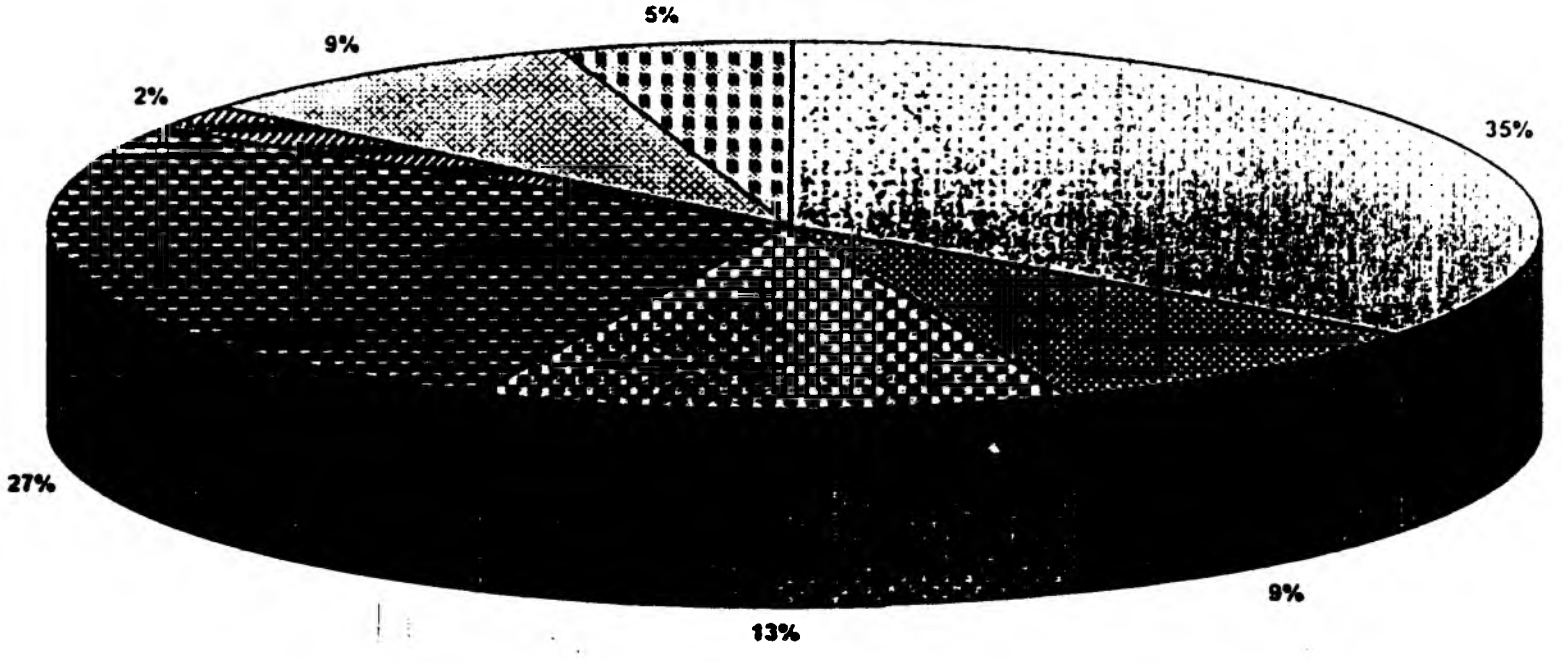
Note : * = New Scheme

Graph- 3 % Distribution 9th Plan Funds

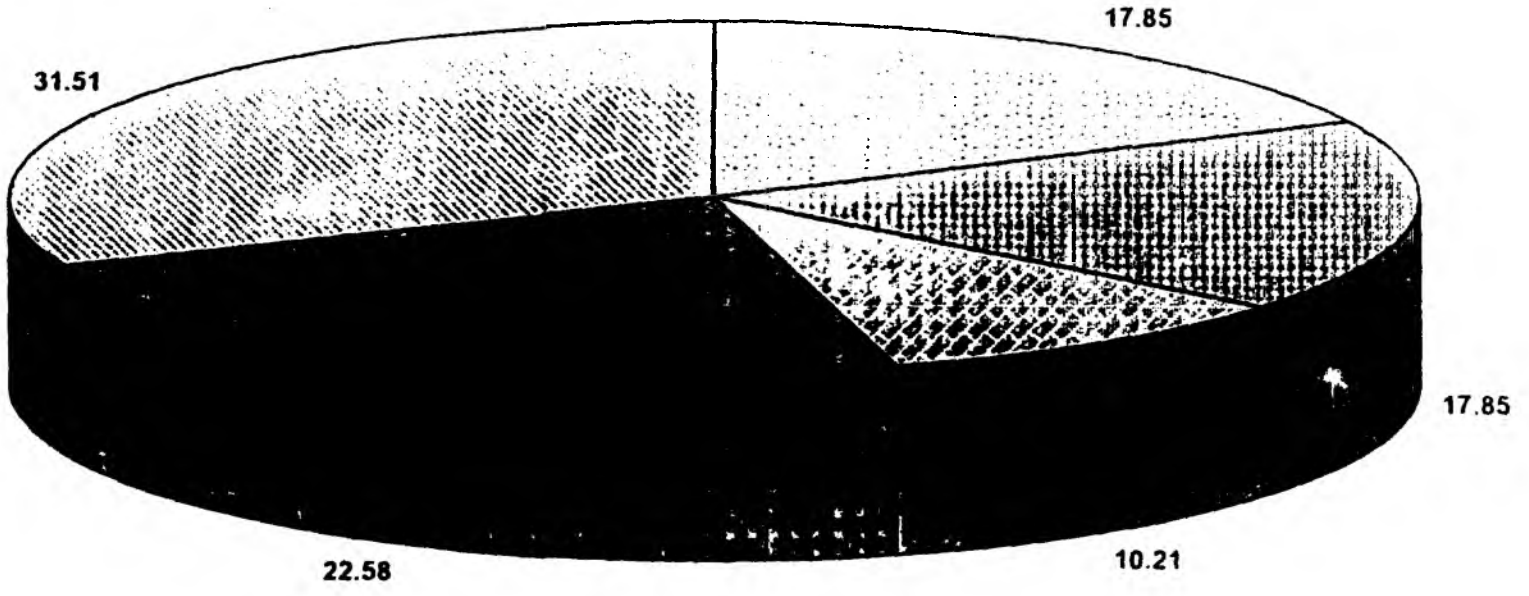


- Development of Universities
- Enchancing Access & Equity
- Promotion of Relevance
- Promotion of Quality & Excellence
- Improvement in Management & Efficiency of Higher Education
- Program ato Strengthen Scientific Research
- Engineering and Technology

Graph - 4 % Distribution 10th Plan Proposed Funds



Graph- 5 Distance and Open Education System



☐ Gyan Darshan & Gyan Vani
☐ System Development
☐ Special Measure for Disvantaged Group
■ Support to SOUs and DEIs
☐ IGNOU

Annexure-I

Details of the Various Development Schemes under the 10th Plan

Sector 1 : Development of Universities and Colleges

The UGC has been providing financial assistance to all eligible Central and Deemed Universities, both under Plan and Non-Plan schemes/programmes, while assistance to State Universities is available only under Plan schemes.

The objective of providing development (Plan) grants is to improve the infrastructure and basic facilities in the universities so as to achieve at least a certain threshold level as also to develop excellence in those who are already ahead.

General development assistance to individual universities is allocated on the basis of the outlays determined and communicated to the Universities. Two-third of the outlay to be released is based on the procedure indicated in the guidelines. However, one-third of the outlay will be finally decided on the basis of the performance of the individual University, which would be evaluated on the basis of the performance appraisal criteria. The outlays, determined and communicated to the University, will be in operation for the period 1.4.2002 to 31.3.2007.

Development assistance may be utilized for the consolidation of existing infrastructure and for modernizing teaching, research and administration as also for extension and field outreach activities to meet the changing needs of the Universities to respond appropriately to demands of society.

The assistance is provided for the following:

Staff : Both teaching and technical staff (This is only for appointments above t he pay scale of Rs.2200-4000-unrevised).

Equipment : For laboratories, special office equipment (excluding furniture, fixtures and typewriters) and modern teaching aids, and for the repair of major equipments.

Books and Journals

Buildings : Construction of new buildings and major repairs/renovation of old buildings. The buildings may be academic buildings, administrative block, staff quarters, hostels, guest-house etc.

Campus Development : for construction of roads, electricity, water and sewerage lines, plantation, development of land etc.

Health Centre : This should be in the nature of dispensary. It should have basic facilities but specialist facility should not be attempted in the centre.

Student Amenities : such facilities may include canteen, recreation room, counselling centres for students etc.

1.1 Central Universities
1.2 New Central Universities

Objectives: Establishment of Central Universities.

Targets: Provision is being kept for establishment of central Universities if so required. This provision would also be available for upgradation/conversion of state universities to central universities.

Justification and Anticipated Impact: The need for creation of new Central Universities has been felt for the last several years. This is because of two reasons; firstly because of need to create fully centrally supported universities to achieve higher order of academic excellence and secondly, because of demand from such States who do not have Central Universities presently. It is felt that in addition to creation of a few Central Universities it would be appropriate if a few State Universities are identified and they are converted into Central Universities. This would not only support good State Universities but also be a cost effective approach.

1.3 Deemed Universities
1.4 State Universities

Objectives: To provide basic development grant to Universities for improving infrastructure.

Target: All approved Central, State and Deemed universities included under Section 2(f) and 12B of the UGC Act are eligible for plan funding. The number of students, teachers, faculty size, performance during the last plan are major criteria for deciding the quantum of funding.

Justification and Anticipated Impact: This would help universities to add faculty in newly started and established departments, to add physical infrastructure, to improve academic infrastructure such as laboratory equipments,

library books etc. It, therefore, would improve the overall infrastructure of the university.

.5. *Development of Delhi Colleges*

Objectives: To provide basic development grant to colleges for improving infrastructure.

Target: Colleges of Delhi University.

Justification and Anticipated Impact: The academic and physical infrastructure at the undergraduate level will improve. The colleges would also use money to be part of the UGC communication network.

.6 *Development of State Colleges*

Objectives: To provide basic development grant to colleges for improving infrastructure.

Target: All colleges (5169) that are eligible to receive grants from the UGC.

Justification and Anticipated Impact: The academic and physical infrastructure at the undergraduate level will improve. The colleges would also use money to be part of the UGC communication network.

.7 *One-Time Grants to Universities for Books & Equipment*

.8 *Promotion of Structural Convergence of Conventional and Open Education approach/ Correspondence Courses*

Objective: To interlink conventional and open systems to cater to increasing demands of higher education.

Target: All eligible universities.

Justification and Anticipated Impact: To meet the enhanced demand for higher education structural convergence of open and conventional education system needs to be initiated. A system of credit based education and credit transfer needs to be established. Modular courses will also provide more flexibility.

) *One-Time Grant to Colleges for Books & Equipment*

10 Autonomous Colleges

Objectives: The concept of autonomous colleges was mainly crystallized on the recommendations of "The Education Commission of 1964-66" and of National Policy on Education (1986-92) with a view to achieving excellence in the Higher Education System by providing academic freedom for colleges with potential.

An autonomous college has freedom to:

- Determine and prescribe its own courses of study and syllabi;
- Prescribe rules for admission in consonance with the reservation policy of the State Government;
- Evolve methods of assessment of students work, the conduct of examinations and notification of results;
- Use modern tools of educational technology to achieve higher standards and greater creativity.

Target: To have 10% of the existing colleges (10% of 5169) as autonomous colleges by the end of plan.

The tested way to improve the quality of undergraduate education is to de-link most of the colleges from the affiliating structure. The colleges with academic and operative freedom are doing better and have better credibility. The financial support to such colleges boosts the concept of autonomy. It is proposed to increase the number of autonomous colleges to spread the culture of autonomy.

ctor 2 : Enhancing Access & Equity

Women's Hostel

Objectives: To support universities and colleges for the construction of women hostels.

Target: All eligible universities and colleges.

Justification and Anticipated Impact: In order to admit women students to higher education, there is a great need to help the universities to construct women hostels so that women can pursue higher education without much difficulty. It will also encourage the mobility of women students to pursue higher education in the universities and colleges of their choice.

.2 *Day Care Centres*

Objectives: To help the women to continue their academic careers.

Target: All eligible universities.

Justification and Anticipated Impact: As women have to discharge dual responsibilities at home as well as outside, it becomes necessary to provide them the facilities such as day care centres so that some of their obligations towards the family are taken care of. Under this scheme universities and colleges would be supported to Open Day Care Centres, where all the teachers and employees can bring their children on payment basis. The UGC has to provide initial establishment grant.

.3 *Infrastructure for Women students & Teachers*

Objectives: To provide proper infrastructure facilities specially for women students and teachers.

Target: All eligible universities and colleges.

Justification and Anticipated Impact: In certain institutes the infrastructural facilities are very poor where there are no common room and even toilets for women students and teachers. It is, therefore, proposed to build proper infrastructural facilities for women.

.4 *Scholarship for Women in Professional Courses*

Objectives: To encourage greater participation of women as academics.

Targets: All eligible women candidates.

Justification and Anticipated Impact: Family and other obligations frequently interfere with women pursuing an academic career. In order to boost the participation rate of women in the academic profession provision is proposed to be made for part-time Junior Research Fellowship/Research Associates etc.

2.5 *Women Studies Centres*

Objectives: To strengthen and sustain the women study centres in the universities.

Target: Universities and Colleges

Justification and Anticipated Impact: UGC has already established 33 Women Studies Centres in universities and four Women Studies Cells in the colleges. Each Women Studies Centre undertakes teaching, research and extension, and works in areas of gender equity and women's education.

2.6 *Family Studies*

Objectives : To promote integrated families.

Target: All eligible universities and colleges.

Justification and Anticipated Impact: On the pattern of women studies, it is proposed to introduce Family Studies Centres which will further the concept of integrated families. This may reduce the instances of broken families and will help in inculcating good values amongst family members.

2.7 *Scheme for SC/ST and SC/ST Cells*

Objectives: To implement the reservation policy for SC/ST in the universities and colleges.

Target: Universities and Colleges.

Justification and Anticipated Impact: Specific provisions for reservation in favour of members of scheduled castes and scheduled tribes have been made in the Constitution of India. To ensure the effective implementation of the reservation policy in admission, recruitment, allotment of staff quarters, hostels etc., SC/ST cells are established in the universities.

2.8 *Remedial Coaching for Admission/NET/Services*

Objectives: To encourage members of disadvantaged groups to qualify NET examination

Target: **Disadvantaged Groups.**

Justification and Anticipated Impact: There is a poor representation of SC/ST candidates in the teaching profession because of non-availability of qualified SC/ST candidates. NET being the mandatory eligibility condition for lectureship in the university/college, special coaching to the members of the disadvantaged groups for NET examination will help in increasing the number of NET qualified SC/ST candidates for teaching posts.

2.9 *Facilities for Disadvantaged*

Objectives: To develop courses for persons with special needs and to provide facilities to the differently abled persons.

Target: Differently-abled persons.

Justification and Anticipated Impact: There is a need to provide special education programme as well as infrastructure to the differently abled persons. The academic infrastructure needs to become disabled friendly so as to provide for better access to classrooms, laboratories and toilets etc.

2.10 *Remedial Coaching for Minority Groups*

Objectives: To achieve social justice and equity amongst the weaker sections of the society including minorities.

Target: Minorities and Weaker Sections.

Justification and Anticipated Impact: These centres enable the students to bridge the gap resulting from their earlier education and social deprivation. It also improves the academic level of comprehension of students belonging to disadvantaged groups.

.11 *Visiting Teachers from Kashmir & NE Region*

Objectives: To provide opportunities to migrant Kashmiri teachers/teachers of NE region.

Target: Migrant Kashmiri teachers and teachers of NE Region.

Justification and Anticipated Impact: Due to continued disturbances in Kashmir and in the North East, many teachers from these areas have migrated to peaceful regions. These teachers need to be rehabilitated and employed usefully in our universities and colleges. A scheme has been formulated for the purpose.

.12 *Development Assistance for Colleges in Backward Areas*

Objectives: To provide basic development grants to colleges located in backward regions for protecting equity and access.

Target: All the eligible 500 colleges situated in backward areas.

Justification and Anticipated Impact: The basic infrastructure in these colleges would improve. Since they work under very adverse conditions, they need funds to upgrade and create infrastructure to attract students and faculty. The academic environment in these colleges would improve with such timely help.

.13 *Development Assistance for Universities in Backward Areas*

Objectives: To provide basic development grant to universities located in backward region for protecting equity and access.

Target: All the eligible 50 universities situated in backward areas.

Justification and Anticipated Impact: The basic infrastructure in these universities would improve. Indeed they work under very adverse conditions and need funds to upgrade and many a time to create infrastructure to attract students and faculty. They are the institutions that need connectivity for communication. The academic environment in these universities would improve with such timely help.

2.14 *Adults and Continuing Education*

Objectives: To undertake Literacy programmes as well as those for Population Education, Science for People, Environment Education, Legal Literacy and Technology Transfer, Continuing Education & Extension.

Target: Universities and Colleges.

Justification and Anticipated Impact: The departments/centres will undertake short-term courses, Certificate/Diploma Courses for graduates or post-graduates, for equipping them with the necessary skill in the changing socio-economic environment. Adult Extension Education will conduct skill based short-term courses. For outreach activities the departments will frame the programmes to reach the community. It would, therefore, help to impart education for those not eligible for university based courses and provide for community outreach.

2.15 *Population Education*

Objectives: To enable the youth in universities and colleges and the community, to comprehend clearly the issues related to family size, quality of life, gender equity, reproductive health, AIDS, impact of population growth on society and nation.

Target: Universities and Colleges.

Justification and Anticipated Impact: UGC has a joint project with United Nations Funds for Population Activities (UNFPA). Under this project UGC has set up 17 Population Education Resources Centres (PERC) which undertake various activities to meet the objectives of the project. These centres provide counselling services, technical support to the university system, resource sources for various activities, impart training, hold workshops, exchange programmes, etc.

2.16 *Counselling Cells*

Objectives: To establish Counselling Cells in the Universities.

Target: All eligible universities.

Justification and Anticipated Impact: In the changing scenario and competitive world students are put to various pressures like selecting courses, examinations, results and issues arising out of the student- teachers relationship. They need to be counselled regularly to guide them to choose the correct path. The role of Counselling Centres in the university system thus becomes very important.

2.17 *Special Scheme for Universities/ Colleges in North East and Kashmir*

Objectives: To help in mobilization and integration of teachers in the NE and Border areas with the rest of the country.

Target: Teachers in North Eastern and Border Areas.

Justification and Anticipated Impact: A special scheme has been conceived for teachers in the NE region and border areas. Teachers in these regions can go as guest teachers to other universities for a period of 2-3 years. This will strengthen integration.

2.18 *Special Development Grants to Colleges for Strengthening infrastructure including improvement in Work Environment of Colleges*

Objectives: To provide well defined development grants to newly established colleges.

Target: All the eligible colleges which are included in Section 2(f) and 12B of the UGC Act during the IXth Plan and Xth Plan will be covered under the scheme.

Justification and Anticipated Impact: The colleges that are new are more amenable to change and timely help would help them to introduce innovation and accept challenges of the future.

2.19 *Special Development Grants to Universities for Strengthening infrastructure including improvement in Work Environment of Universities*

Objectives: To provide basic development grants to newly established universities.

Target: All the eligible universities which were established during the IXth Plan and the ones which would be established in the Xth Plan would be covered under the scheme.

Justification and Anticipated Impact: Newly established universities are more amenable to change and timely help would help them to introduce innovations in academic structures and accept challenges of the future.

2.20 Special Support Activities for SC/ST, Minorities, Women & Disadvantaged Groups in Computers, Communication and Information & Bio-technology Studies

Objectives: To impart special support activities for SC/ST, Minorities, Women and Disadvantaged Groups in Computers, Communication and Information and Bio-technology studies.

Target: SC/ST, Minorities, Women and Disadvantaged Groups

Justification and Anticipated Impact: To support SC/ST, Minorities, Women and Disadvantaged Groups in Computers, Communication and Information and Bio-technology Studies. Since, these groups are un-represented in these areas and in order to bring them in the mainstream support would be provided for these special activities.

Sector 3 : Promotion of Relevance

The curriculum forms an important base for teaching and learning. One has, therefore, to evolve mechanisms to continuously update curriculum and UGC, in recent times, have done the same in 30 subjects in different disciplines. It is essential to support implementation of these CDC reports. There are many more subjects and areas that need to be supported in teaching as well as research.

Innovations always need re-orientation of the teacher community. Academic Staff Colleges have proved to be an important asset for augmenting the skills of teachers and UGC intends to use this very useful instrument for re-orientation of teachers in the Xth Plan.

Relevance has been of critical importance in the higher education sector particularly in the basic disciplines. Employers have always been demanding college/university pass outs equipped with necessary skills. This is all the were so in the current economic scenario where demand from the service sector is on the rise. One way of approaching the problem would be to provide students at the undergraduate level to acquire both a degree and a diploma based in acquisition of some skill. Alternatively a dual degree with one more year put in after graduation could be considered.

3.1 *Career Orientation of Courses*

Objectives: To initiate skill-oriented-add-on courses that have utility at the undergraduate level.

Target: All eligible universities and colleges.

Justification and Anticipated Impact: The UGC initiated a major program of vocationalization at the undergraduate level during the VIII Plan In recent times information and communication skills have become an essential tool for every degree holder. The service industry is on the rise and they are looking for graduates who have sound base in their core discipline and also added skills. Such needs are emerging in science disciplines with demand for ICT expertise, refrigeration, bio-technology for agriculture produce and, in social sciences & humanities sciences and Arts with opening for entrepreneurship in applied sociology, applied psychology, tourism, translation proficiency etc. and in commerce and economics with need for expertise in insurance, banking, world trade, foreign exchange regulations, impact of WTO on trade etc. In addition many new avenues are coming up like Intellectual Property Rights, legal aspects related to foreign trade, environment, health services, hospital management etc. The best way to make graduates more useful is to give them a sound base in a basic discipline that would give them a foundation and expertise to analyze and use knowledge in an useful way and training in different skills that give deep understanding in allied utility oriented topics/subjects. Such persons, as they become useful immediately and moreover because of their grounding in a core discipline are flexible & adaptable for changing scenario, are the need of the hour. UGC would like to introduce the flexibility of doing degree and certificate/diploma simultaneously in universities. The students would not only use their time more effectively during their three years of undergraduate education but would further be equipped with dual degree & diploma.

3.2 *Incentives Schemes for Implementing Reforms*

Objectives: To create conducive environment for introducing reforms in higher education, it is proposed to give incentives to the universities for introducing reforms.

Target: All Universities and Colleges.

Justification and Anticipated Impact: UGC has been promoting a number of reforms in classroom teaching, conduct of laboratories, fieldwork, evaluation methods and many similar matters, which directly affect the quality of education. The university system is an independent stand-alone system and is managed by many internal as well as external elements. Several universities go for changes at

operative level within the given frame of their Acts and such universities would be given incentives to do their task more efficiently. The impact would be on quality of education.

3.3 Emerging Areas and Incentive Programs including Promotion of Centers in Peace Management-Conflict Resolution, WTO Related Studies in Law, Social Sciences and Humanities

Objectives: Promote teaching and research in emerging areas.

Target: All eligible universities.

Justification and Anticipated Impact: Higher education is a dynamic system and over the years several important areas in each discipline emerge as a front line area. There is always a need to support teaching and research in such areas and UGC has identified several areas that would be supported in this plan period. The students would get an opportunity to get training in these areas.

3.4 Physical Education & Sports

Objectives: To strengthen sports infrastructure in universities and colleges.

Target: All eligible universities and colleges. Each higher education institution feels the need for sports facilities. The UGC would like to further support such universities and colleges which are paying special attention for training of sportsmen and women in different sports. It is expected that talented sportsmen and women would get good facilities to improve their caliber.

Justification and Anticipated Impact: The University Grants Commission is the implementing agency for the scheme of Creation of Sports infrastructure in Universities and Colleges introduced by the Department of Youth Affairs and Sports. The scheme aims at providing assistance to the universities and colleges for the development of sports infrastructure.

The Three Year Degree Course in Physical Education, Health Education and Sports was introduced by the University Grants Commission during 1988-89 in 29 institutions. The Commission has been providing assistance to these Institutions for approved items of expenditure like salary of the staff, books and journals, equipment and laboratory building.

3.5 Promotion of Yoga Education and Practice

Objectives: To impart special education in various areas like Yoga, Positive Health, Career, Personality, etc.

Target: Universities and Colleges.

Justification and Anticipated Impact: It will help in the overall development of the personality of students. The concept of positive health and life long learning are relatively new concepts which need to be promoted. An overall development of the individual is intended through higher education using affective domain in addition to cognitive skills. The Departments of Human Consciousness and Yogic Sciences would be further strengthened.

3.6 Academic Staff Colleges: Support for Ongoing Programs as well as development of Infrastructure for Administrative Staff Development

Objectives: To widen and enhance the range and scope of Academic Staff Colleges (ASC). They would be supported for time-bound activities in improving and strengthening the skills of teachers. A few more new ASCs would also be created so as to have uniform geographical balance.

Target: All existing Academic Staff Colleges.

Justification and Anticipated Impact: The ASCs have proved to be good instruments in teacher training and orientation. Their need and importance is useful even now, particularly in an emerging and competitive environment. Teachers would be trained for use of UGC network and also for development and use of electronic courseware. They also will be given skills for effective use of multi-media infrastructure in the classrooms. The emphasis and scope of Academic Staff Colleges would be redefined and they would be asked to initiate a large number of time bound activities in teacher training. The need for continuous upgradation of teaching skills is a continuous activity as it has direct bearing on classroom teaching. Value education programme will also be undertaken by the ASC.

3.7 Subject Panels/Curriculum Development Committee

Objectives: To support teaching-learning innovations in different subjects.

Target: Such universities that have expertise for doing prototype development of support teaching material.

Justification and Anticipated Impact: UGC has done a massive exercise on development of model curriculum in different subjects. These curricula have been developed by group of experts in each subject both at the undergraduate and post-graduate level. They have made several interesting and innovative suggestions to enhance the learning process. There is, therefore, need to undertake organized activity in each subject to develop useful teaching learning material. UGC would identify university departments with adequate expertise and entrust them the responsibility of development of material. These centers would work as resource development centers and they would also disseminate knowledge to all other universities. This activity would enhance the quality of teaching both at the undergraduate and post-graduate level significantly.

3.8 Value Education & Human Rights Education

Objectives: To promote Value Education and Human Rights and Duties Education in Universities/Colleges.

Target: Universities and Colleges

Justification and Anticipated Impact: There is a universal anguish today at the drift towards anarchy in terms of human behaviour, the erosion of human values and desecration of the moral landscape. Disproportionate and excessive emphasis on the rights of citizens, as against duties, has ignored the fact duty is an inalienable mandatory part and source of right. Value Education has to be made an integral part of various regular courses and programmes. It can also be incorporated as a foundation course at the under-graduate level. Human Rights and Duties Education courses are introduced at PG level in the form of Degree, Diploma or Certificate Courses.

3.9 New Schemes to be Initiated by Universities

Objectives: Higher education is a dynamic process. Globalization coupled with dynamic economic scenario is directly linked with trained human power. Each nation is adopting its own strategy to keep higher education system in tune with the change. The change is continuous and one has to quickly adapt to change by re-orienting the system. It is therefore essential to keep a shelf of "new schemes" in the plan.

3.10 Traditional Language/ Sanskrit Speaking Centers/Karmkand

Objectives: To promote Traditional Languages

Target: Universities and Colleges.

Justification and Anticipated Impact: It is proposed to give more impetus to ancient languages like Sanskrit. Many schemes would be launched to promote these languages like opening of Simple Sanskrit Speaking Centres.

3.11 History of Science and Ancient Heritage/Vedic Astrology/Yogic Science/Human Consciousness/Applied Philosophy

Objectives: To conduct studies, research and extension programme to promote the ideas of great thinkers and apply them in the reconstruction of human society on moral, ethical and spiritual foundations for a non-violent world.

Target: Universities and Colleges.

Justification and Anticipated Impact: India has produced great thinkers and social leaders who by their revolutionary and path breaking actions have left a lasting impact not only in India but also on the world as a whole. They have developed indigenous ideas and have provided cultural and ethical identity to India. So there is a great need to acquaint the teachers and the students with their thinking in their work and to involve them in studies, research and field based extension service programmes of constructive work. Similarly, our ancient knowledge need to be preserved and promoted. A scheme has been devised for the purpose. All the eligible universities will be supported under this programme.

Sector 4 : Promotion of Quality and Excellence

The Indian higher education system, in recent times, has become fully aware of the need for doing the things keeping in view the quality aspect of things. The globalization of education has forced comparison between various educational institutions. The institutions will have to adapt to modern methods of teaching learning, develop learner friendly teaching material, change their evaluation methods and strive for excellence to sustain themselves in this competitive world. They will have to re-train their teachers and equip them with skills that will enhance the quality of teaching and research. Quality and excellence do not happen accidentally. Organized and focused efforts are needed to achieve them and that is what UGC intends to do in this plan. There is a need to nurture and promote autonomy in colleges and university departments. There is also a need for more serious effort in teaching of pure sciences if one has to

reverse the present lack of interest in the learning of basic sciences. Special concentrated efforts are needed not only to strengthen science teaching in the present universities but also to establish higher education institutions that would adopt different structures and strategy in teaching of sciences.

4.1 SAP/DRS/DSA/CAS in Humanities and Social Sciences

Objectives: To identify and support University Departments that have potential to do quality teaching/research in various social sciences/humanities/arts/law and allied disciplines.

Target: A few University Departments in above mentioned disciplines.

Justification and Anticipated Impact: The disciplines of social sciences/humanities/arts/law and allied areas are the disciplines of the future and there is need to initiate specialized teaching programs that are the need of the society in the present fast changing world. Moreover, the advent of Information & Communication revolution has thrown open many virgin research areas that have direct bearing on human behaviour. There is need to identify departments with expertise to undertake such interesting and challenging work and support them by giving funds and appropriate status. The SAP activity gives boost to subjects in all the above mentioned disciplines.

4.2 Internal Quality Assurance Cells in Universities and Colleges

Objectives: To make universities and colleges to establish Internal Quality Assurance Cell and go through the assessment and accreditation process of NAAC.

Target: All universities and colleges.

Justification and Anticipated Impact: Quality needs to be nurtured and protected in a continuous manner. The system has to have built in mechanism for devising, implementing and monitoring of quality and the best way is to establish Internal Quality Assurance Cell (IQAC). UGC would promote this concept in this plan and also would ensure that the universities and colleges go through NAACs' quality judgment process.

4.3 *Development of Teaching Course-ware, Multi-media content material and Course-ware Repository Development/University Level Text Books*

Objectives: To undertake an exercise in development of multi-media courseware development in different subjects and also to create courseware repository.

Target: Identification of suitable University Departments that have appropriate expertise and entrust them with responsibility of co-coordinating content development. This would be done initially in 32 subjects for which the experts at the initiation of UGC have developed modern and ideal curricula.

Justification and Anticipated Impact: The useful and intelligent use of multi-media material in the teaching and learning process is now well accepted and several universities in the world are in the process of development of courseware that could be accessed through Internet. One can create a repository of such material. In addition there is need to develop multi-media content. The organized activity for development of courseware would be done in different university departments. They would use the curriculum developed under CDC activity of the UGC and identified departments would bring in the experts, both in subject matter and multi-media development, for the entire country for creation of multi-media content. They will also identify and select appropriate and useful material by other institutions in India and abroad and create a repository of courseware in assigned subjects. The UGC network would provide connectivity to universities and colleges. This would give free flow of support material and this would improve the teaching & learning process in colleges and universities. This would create a virtual enhancement of academic infrastructure in each higher education institution. It would also help to create a bridge between open and conventional education that would enhance access to higher education.

4.4 *Research Projects in Humanities & Social Sciences*

Objectives: To provide support for research programs from teachers in various disciplines.

Target: Identified teachers (in universities & colleges) that have shown potential in doing research.

Justification and Anticipated Impact: Research is an integral part of every higher education system. Individuals with liking for research need to be supported in the tenth plan.

4.5 College Humanities and Social Science Improvement Programme (COHSSIP)

Objectives : To strengthen Humanities and Social Sciences programmes in the colleges

Target: Colleges

Justification and Anticipated Impact: To improve teaching and research in the area of social sciences and humanities. It is an on-going programme of the UGC.

4.6 Travel Grant

Objectives: To provide opportunity to teachers to attend national and international seminars, conference, workshop/training and to University Administrators to get exposure

Target: University and College teachers and Administrators.

Justification and Anticipated Impact: Under this scheme teachers will have an opportunity to present their research papers or different academic activities at national/international forums. It will also enable teachers to attend short training programmes at different institutes. This will enable them to improve their academic caliber.

Under this university/college administrators would be provided with an opportunity to attend training programmes or seminars, workshops in other institutes in India or abroad. It will enable them to think and work out new approaches in the management of higher education.

4.7 Unassigned Grant

Objectives: Block grants to universities for seminars, symposia, research travel and publication.

Target: Universities

Justification and Anticipated Impact: UGC provides unassigned grant to universities enabling the teachers to participate in conferences in India and abroad for holding seminars and symposia, publication of research work and minor research projects. It is an on-going scheme of the UGC.

4.8 Seminars & Conferences

Objectives: To organize workshops, seminars and conferences

Target: Universities and Colleges.

Justification and Anticipated Impact: The UGC provides grants to Universities/Colleges for organizing workshops, seminars and conferences. This facilitates academic exchange of ideas and enables the students and teachers to update their knowledge. It provides a platform for peer groups discussions on various issues related to teaching, research and extension. It is proposed to continue this scheme in the Xth Plan.

4.9 National Educational Testing (NET)

Objectives: To strengthen existing national test mechanisms for certification of persons eligible for the research and teaching professions.

Target: All post-graduates who wish to undertake research/teaching.

Justification and Anticipate Impact: UGC has been conducting NET for last several years and it is found that it works as a good filter for identification of suitable persons not only for the teaching profession but also for research fellowships. In science and technology subjects UGC holds test jointly with CSIR where as in humanities, social sciences, Arts, literature and other disciplines UGC alone holds the test. The NET is now accepted as a quality ensuring mechanism and needs support in future. The UGC is also planning to take NET abroad.

4.10 Research Awards

Objectives: To provide opportunity to the teachers involved in teaching to pursue research for a brief period of time.

Target: University/College Teachers

Justification and Anticipated Impact: The teachers who are involved in teaching and have shown aptitude to pursue research will be selected. These teachers will carry out research at research institutes or any other university department. As research and teaching go hand in hand, it will provide an excellent opportunity to the teachers to improve their teaching methodology and also to utilize research expertise.

4.11 Utilization of services of Retired Teachers/Emeritus Fellow/Visiting Professor

Objectives: To utilize the expertise of retired teachers for academic activities.

Target: Retired teachers.

Justification and Anticipated Impact: The expertise of retired teachers will be of great benefit to the universities and colleges. These teachers can help the institutes for various academic activities like teaching research, publications and academic administration etc.

4.12 Support for Area Studies

Objective: To undertake studies relating to problems and culture of different countries and regions of the world, particularly with which India has a close and direct contact.

Targets: *All eligible Universities.*

Justification and Anticipated Impact: UGC is already providing grants to 19 Area Studies Centres which are undertaking studies relating to problems and culture of the given area and for developing inter-disciplinary research and teaching within a comparative framework. These studies would be of help to Ministry of External Affairs for taking various policy decisions.

4.13 Networking of Universities/ UGC-Net: Intranet and Internet Connectivity for Colleges and Universities/ IT Orientation

Objectives: To provide Intranet and Internet Connectivity to Universities and Colleges and to orient teachers in IT Education

Target: Universities and Colleges.

Justification and Anticipated Impact: An information flow network will be established by creating inter-connectivity in each university in the country. Each university would be provided with assured reliable bandwidth for up-linking and down-linking purposes. Each university will be encouraged to establish a local area network so as to create connectivity in the campus. To establish a college network, universities will also be supported for connecting all the colleges in their jurisdiction.

4.14 Modernization of Teaching/ Digital Repository of Research & Teaching material

Objectives: To provide access to electronic research journals as a central service.

Target: All colleges and universities, to be covered through 16 mirror sites to be created for the purpose.

Justification and Anticipated Impact: The universities find it difficult to meet the ever-increasing cost of research journals. They, over the years, are therefore, reducing the number of research journals to be subscribed and this affects the research environment. The UGC network would provide connectivity between all the universities (and colleges in a time bound manner) and therefore creation of geographically and evenly distributed mirror sites (which would hold current and back volumes of research journals in all subjects in all disciplines) would provide access to each and every research worker and teacher. Such a centralized electronic material access would enormously enrich research activity in universities.

4.15 *Faculty Improvement Program*

Objectives: To pursue higher education, i.e. M.Phil. and Ph.D. for regular teachers

Target: University and College teachers

Justification and Anticipated Impact: UGC has revised the guidelines for teacher fellowship during the IX Plan. There is no limit on the number of fellowships which can be given and duration has also been enhanced. It will give an opportunity to the teachers appointed in colleges or universities to pursue research, i.e. M.Phil and Ph.D. These pursuits will improve their academic caliber.

4.16 Reimbursement of Expenses to Non-university Institutes

4.17 Raj Bhasha

4.18 *Promotion of Excellence in Universities including development of IT Infrastructure and Support and IT Orientation*

Objectives: To help selected universities to achieve excellence in teaching and research activities.

Target: Universities.

Justification and Anticipated Impact: One way of improving standards of teaching in universities is to induce them to do critical analysis of the present strengths and ask them to devise strategy, working plans and mechanism to achieve greater heights, comparable to higher standards of quality at global level, in their post-graduate teaching and research programs. The universities are also expected to have a strategy so that their innovations percolate to the undergraduate level. UGC has initiated this approach in the IXth plan by selecting five universities. It would like to identify a few more universities and support them in block grant manner, spread over three years, to improve their academic infrastructure and research facilities. These universities would achieve good standards in teaching and would focus on research in selected thrust areas. Apart from creating such "universities with excellence" this approach would also improve undergraduate teaching in colleges.

4.19 *National Lecturers*

Objective: To attract and retain talent in Pure Science.

Targets: University toppers in science courses.

Justification and Anticipated Impact: It is proposed that university toppers in science subjects would be offered lecturership through a selection process without passing NET. However, they would be required to complete NET within two years. They would simultaneously pursue Ph.D. courses.

4.20 *Adjunct Professor: Interaction with Business Community*

Objectives: To promote University Industry interaction.

Target: Universities and Colleges

Justification and Anticipated Impact: It is proposed that the experts from Industry would be invited to the universities for teaching specialised courses. They would be given the honorary status of "Adjunct Professors". This will help in making education more relevant to industry needs.

4.21 *Promotion of Excellence in Colleges including development of IT Infrastructure and Support and IT Orientation*

Objectives: To help selected colleges to achieve excellence mainly in teaching activity and initiate research culture in such institutions.

Target: To identify 100 colleges and support them to improve their academic infrastructure.

Justification and Anticipated Impact: Undergraduate programmes occupy the greatest space in the higher education sector. With a view to overcoming the limitations of the affiliating system, the UGC has been promoting autonomy in colleges since the VIIth plan period. The basis is to allow good colleges to innovate and experiment in undergraduate teaching and learning activity. On the pattern of the scheme of universities with potential for excellence, UGC now desires to identify through out the country at least hundred colleges in the Xth plan who have potential for excellence. These colleges would improve their academic infrastructure, would go for innovations in teaching, adopt modern methods of learning & evaluation and also introduce a flexible approach in selection of courses at the degree level. Such colleges would act as role models for other colleges in their region of operation. The colleges would also be given joint "degree conferring status" with their names on the degree certificates. Such a sense of responsibility would enhance their credibility and induce them to do good quality teaching. These colleges would also be encouraged to initiate research activity, which would give a positive feedback to their teaching programs.

4.22 *Institutionalization of Teaching and Research in Inter-disciplinary Areas*

Objectives: To strengthen inter-disciplinary and multi-disciplinary studies.

Target: University departments.

Justification and Anticipated Impact: There is a need to consider inter-disciplinary/multi-disciplinary approach in identified areas in respect of national and global priorities. Disciplines like Defence and Strategic studies which includes national security affairs, insurance and banking, economics and world trade, bio-technology, genomic sciences are in a true sense of a multi-disciplinary nature, cutting across the disciplines of sciences, humanities and social sciences, and are of importance in the rapidly changing global scenario. These and allied disciplines need to be studied and researched in a more organised manner. It is also proposed to support teaching and research in the fields of History of Science, Defence Strategies, etc.

4.23 Computers and Internet Literacy for Teachers & Administrators

Objectives: To impart Computer and Internet Literacy to teachers and administrators.

Target: Teachers and administrators.

Justification and Anticipated Impact: Teachers and administrators will be provided with computer and internet literacy and also training in multi-media material development. It will help in capacity building in areas of teaching, research and extension.

4.24 Grant for promotion of Export of Higher Education

The Indian graduate is now accepted as a well-trained entity at the global level. This is happening across the board, that is in all disciplines and in all subjects. Thus Indian higher education has the potential of gathering wider acceptance in other countries. Special efforts are need to export higher education. This also requires creation of an appropriate environment for international cooperation. The 21st Century is a century of international cooperation and collaboration. UGC would make special efforts in both the export of higher education and international cooperation.

There is a great demand of Indian education in foreign countries. In the Xth Plan, a three-pronged strategy is being evolved to deal with the export of Indian education: (i) Universities are being allowed to open foreign campuses, (ii) 15 per cent supernumerary seats have been created in all Indian Universities for foreign students and (iii) Collaboration of Indian and foreign universities is to be regulated.

Objectives: To evolve a policy to promote free flow of students from other nations to India and vice-versa.

Target: Universities/Colleges.

Justification and Anticipated Impact: Indian Higher Education has been recognised as one of the better systems for producing talented human resource. At the same time, foreign universities are also interested to establish their activities in India through twinning arrangement with Indian Universities. It will help the universities to expand their activities outside India and also to export Indian education to the world at large.

4.25 *International Co-operation/Cultural & Academic Exchange Programs*

Objectives: Bilateral Exchange Programme between India and other countries.

Target: University/College Teachers.

Justification and Anticipated Impact: UGC has already a Bilateral Exchange Programme between India and other countries in the universities sector on behalf of the Government of India. Under this programme, foreign scholars visit Indian Universities under the Cultural Exchange Programme. There is a provision for exchange of foreign language teachers also.

4.26 *Inter-University Centers including establishment of IUCs in Social Sciences, Humanities and WTO Related Studies*

Objectives: To support existing Inter University Centres as well as to set up Inter University Centers in Social Sciences and Humanities

Target: Inter University Centres at different places.

Justification and Anticipated Impact: In the VIIth Five Year Plan the UGC promoted the novel concept of building big research facilities for the benefit of researchers spread across different universities. In a sense, these facilities are working as Inter University facility and directly helping researchers in universities. They provided the right research environment and encouraged research students and faculty to undertake major research activities.

Another type of Inter University activity taken up was in the services sector. These were in the field of giving support in library and information sciences, judging quality in universities and colleges and creating multi-media material for teaching purposes. Thus the facilities of INFLIBNET, NAAC and CEC were established.

All the above mentioned activities are continuing activities and they need further support in the Xth Plan.

4.27 *Development Grant for National Facilities*

Objectives: To support specific activities in science research at selected places.

Target: The existing facilities at different universities.

Justification and Anticipated Impact: This is a continuing scheme and it is observed that the presently existing centres in different universities are giving

good support to researchers as well as attracting scientists. Continued support would assure direct help to various researchers in different disciplines and subjects.

Sector 5 : Improvement in Management & Efficiency of Higher Education

One of the most difficult task in higher education is the management of higher education institutions. A professional management approach is necessary for managing higher education. This needs development of appropriate software and training of administrators.

One more healthy habit that UGC desires to inculcate in higher education institutions is to raise resources for their activities. Mobilisation of resources require special efforts and universities and colleges need to be encouraged to do this by giving appropriate incentives. Institutions like the College Development Councils and State Higher Education Councils can be effective instruments for strengthening of higher education.

These are some of the objectives that would be promoted in this sector.

5.1 Incentives for Resource Mobilization (25% UGC Share)

Objectives: To encourage universities to mobilize ,resource through external sources by roping in all state holders.

Target: All eligible universities.

Justification and Anticipated Impact: It will help the universities to mobilise resources through external resources like participation/contribution from individual Indian or Non-resident Indians, Alumni Association, public and family trusts, industrial/business houses, cooperatives, professional associations, unions/association of employees for development of Universities. UGC was so far providing bonus grant to the universities against the resources mobilised by them. It is now proposed to provide full matching grant under the scheme.

5.2 *Training of Administrators*

Objectives: To impart training to administrative personnel of the universities i.e. Vice-Chancellors, Pro- Vice-Chancellors, Registrars, Finance Officers and Controller of Examinations and other staff.

Target: University/College Administrators.

Justification and Anticipated Impact: The performance of the universities and colleges depends upon the way they are managed by the administrators. It, therefore, becomes very important to impart training to university administrators. Administrators would be provided training in the art of academic, administrative and financial management.

5.3 *Professional Management of Universities*

Objectives: To manage the university system professionally and to make them responsive to the socio-economic needs of society at large.

Target: All eligible universities.

Justification and Anticipated Impact: There is a need to manage the higher education system more professionally. Management of the university system must necessarily have an inbuilt flexibility to adapt itself to the changing needs of the country and the region. A Cell would be established in the UGC for the purpose.

5.4 *UGCs' Building & Campus Development including Regional Offices*

Objectives: To construct office accommodation, guesthouse facilities, conference room facilities etc.

Target: UGC Office

Justification and Anticipated Impact: At present the UGC office is housed in three separate buildings at Bahadur Shah Zafar Marg, Ferozeshah Road and South Campus of Delhi University. The Commission also faces difficulty in office accommodation, guest house facilities, conference room and residential quarters. There is also a need for auditorium and other facilities for national and international academic exchanges. Govt. of India has allocated 25 acres of land in the JNU campus to the Commission. It is proposed to construct office buildings, guest house, conference room, residential quarters in the X Plan.

5.5 *UGC Computerization*

Objectives: To manage the higher education system more efficiently.

Target: UGC office

Justification and Anticipated Impact: It is proposed to computerize the functioning to UGC at two levels: Functional Divisions and Support Divisions. This will help the UGC to streamline its functions while ensuring better management of the system of higher education.

5.6 *Training for UGC Administrators*

Objectives: To improve the efficiency and working of UGC officers.

Target: UGC officers.

Justification and Anticipated Impact: UGC officers join the UGC office from different academic streams. They have to perform duties relating to administration in higher education. The officers of the UGC are involved in various policy decisions relating to higher education. In order to improve their efficiency and also the academic profile of the officers, officers will be given training at different institutes in India and abroad.

5.7 *Creation of Reliable Education Data Base*

Objectives: To create a date base for higher education in India.

Target: UGC office

Justification and Anticipated Impact: Policies in higher education are contingent on the availability of data. It is necessary to have reliable and verified data across all parameters in higher education including enrolment (disaggregated by gender, SC/ST, those physically disabled etc.) dropouts, internal efficiency, wastage etc. A Cell would be created in UGC to undertake this work.

5.8 *Policy Research Cell*

Objectives: To create a mechanism for doing projection studies at the policy level in higher education.

Target: UGC Office

Justification and Anticipated Impact: The Indian higher education system is big and complex. "Knowledge" is the key word in the changing economy. Trained human-power with appropriate skills is going to be of importance to any nation. For an emerging nation like India it is of importance to continuously review and re-orient its policy and approach in higher education. It is also necessary to deliberate on such matters with academicians, user sectors, government agencies and others that are directly affected by policy in higher education. UGC desires to initiate several policy studies in the tenth plan in collaboration with agencies like AIU, NIEPA and other organizations.

5.9 Planning & Development Division

Objectives: To open a separate implementation and monitoring cell for the Xth Plan.

Target: UGC Office

Justification and Anticipated Impact: It is proposed to open a separate cell for implementation and monitoring of Xth Plan Schemes which could perform various functions like monitoring, feedback, evaluation, and review of various activities.

5.10 Publication of UGC Documents

Objectives: To publish and print UGC documents.

Target: UGC office

Justification and Anticipated Impact: To print various documents like the data base prepared by UGC, guidelines of various schemes, Annual Report, Curriculum Development Committees report, Journal of Higher Education etc.

5.11 College Development Councils

Objectives: To establish College Development Councils.

Target: All eligible universities.

Justification and Anticipated Impact: College Development Councils are established in universities to coordinate activities of all colleges affiliated with them. This helps the UGC in getting all the information from a single point. The scheme would be continued during the Xth Plan.

5.12 State Councils of Higher Education (SCHE)

Objectives: To establish State Councils of Higher Education.

Target: State Governments.

Justification and Anticipated Impact: To enhance the effectiveness of the management of higher education in every State, it is proposed to establish State Councils of Higher Education as proposed in the National Policy on Education. It will help in improvement of quality, national integration and will bring excellence in every discipline in which instruction is imparted. They will help the UGC in its endeavour of maintaining standard of higher education. Four States, namely Andhra Pradesh, Tamil Nadu, West Bengal and Uttar Pradesh have already established State Councils of Higher Education. It is expected that by the end of Xth Plan, about 20 State Councils of Higher Education (SCHE) would be established.

5.13 Bharat Shiksha Kosh

Objectives: To setup a Corpus Fund.

Target: Universities and Colleges

Justification and Anticipated Impact: There has been suggestions for creation of a Higher Education Finance Corporation or Higher Education Development Bank for providing soft loans to universities and colleges for their development. However, this has not happened so far. Under this plan it is proposed set up a fund with a seed money from Government of India to provide funding support to universities and colleges.

Sector 6 : Programmes to Strengthen Scientific Research

Research and Development has always formed an important component in higher education. Research needs appropriate encouragement and right environment. We need to identify groups of good researchers in different subjects in universities and support them specially for establishing quality programmes in research. UGC would, therefore, establish an independent mechanism in the form of Research Funding Councils for supporting research schemes in different disciplines and subjects. To create the right environment support would be given in the form of travel grants and for conduct of seminars and workshops.

One of the major thoughts would be to promote advances centres for science education and research. This is to promote integrated education in

science with "cafeteria" approach. This is being thought by several national laboratories and agencies for long, as they are feeling the pinch of reduced interest in science education. They would be cooperating with the UGC in creation of such centres. The scheme of National Lecturers is also being promoted to attract talented persons to science education.

UGC would also continue its approach and support to national facilities and Inter University Centres.

6.1 *Committee on Strengthening of Infrastructure in Science & Technology (COSIST)*

Objective: To assist those university departments on selective basis who have already achieved excellence in research, to acquire expensive equipment and to enable them to do research and teaching at an internationally competitive level.

Targets: University Departments

Justification and Anticipated Impact: The university departments will be able to acquire expensive major equipments for continuously maintaining the achieved excellence in research and post-graduate teaching. This programme has generated enthusiasm and a competitive spirit, both among teachers and students. Besides, the infrastructural facilities acquired by the department through this programme have attracted additional funds from other agencies and even abroad. 195 departments have been supported. Under this one time grant is provided.

6.2 SAP/ *DRS/ DSA/ CAS in Science including Emerging Area Research in Genome, Bio-Technology, Bio-Medicine etc.*

Objective: To develop selected university departments which had already shown potential in teaching and research for advanced academic work for upgrading them to the level of Centres of Excellence in the identified thrust areas.

Targets: University Departments

Justification and Anticipated Impact: UGC provides grants under SAP programme at three levels, to the tune of Rs.50-80 lakhs. The selected departments achieve excellence in research in different areas which are relevant to societal needs. These departments also exploit scientific research and technology output for national and societal growth and development. They help in the development of human resource in different areas. A total 220 departments are supported under this programme.

6.3 *Research Projects in Science*

Objectives: To promote excellence in research.

Target: Universities and Colleges

Justification and Anticipated Impact: It will promote research in the university and college sector Traditionally, universities have been the centres of research, while Government has a network of science and technology laboratories for research and development, in fact, the major training ground of researchers in science & technology remains with the universities. Therefore, university and college teachers must be supported to carry out research.

6.4 *Advanced Centers for Science Education and Research*

Objectives: To establish higher education teaching and research institutions with direct tie up with research laboratories and industries.

Target: A new initiative at the national level.

Justification and Anticipated Impact: It is a fact that in recent years bright students are not going for science education. One of the major reasons, apart from the fact that getting degrees in professional subjects have become the order of the day, is that students find the science education devoid of excitement. In the fifties IITs' were established which did a good job in engineering education. Similar efforts need to be done at the national level in science education. UGC would set up five institutions; in four regions of the country that would start five year integrated teaching programs with open and flexible structures. The curricula would be having flexibility with embedded research component. The "cafeteria approach" in selection of courses would be adopted and students would collect grade points to acquire degrees with option of exit at the end of three years. These institutions would have direct tie up with research laboratories and industries. The output of trained students would be of direct help to large number of research establishments like DAE, ISRO, CSIR, DRDO and many other such public and private institutions.

6.5 *Removal of Obsolescence*

Objectives: To support State universities for replacement of obsolete equipment

Target: All State universities that have performed well in the past.

Justification and Anticipated Impact: One of the major difficulties faced by State universities is replacement of outdated and old equipments. It is very

essential to have modern equipment for better teaching and research. This deficiency can be removed by giving one time block grant to deserving State universities.

6.6 *College Science Improvement Program (COSIP)*

Objectives: To strengthen undergraduate science education in colleges

Target: Colleges

Justification and Anticipated Impact: To improve and strengthen science education in the colleges. The support to the colleges would be continued.

6.7 *USIC*

Objectives: To strengthen existing facility for repairs and maintenance of instruments in Universities.

Target: All Universities.

Justification and Anticipated Impact: University departments have several instruments as well as sophisticated equipment to carry out research. In the VI plan UGC created University Science Instrumentation Centres in Universities to establish common instrumentation facility. Many of these USICs' have now become full-fledged Instrumentation Department doing teaching and research in instrumentation science. Many Universities also have Central Workshop facility, which is either stand-alone entity or is an integral part of USIC. It is now essential to further strengthen these workshops for creating modern maintenance facilities to repair equipments. Strengthening of workshops would help universities to do of repairs in-house. Moreover this facility could be used for vocational and add-on courses also.

Sector 7 : Engineering and Technology

Engineering and Technology Education is an important area in higher education. This sector needs to be supported in doing innovative teaching and research as well as in improving and strengthening of academic infrastructure. Several schemes to do this are projected in this sector. Good quality professional education is the need of the hour and that is what the UGC intends to support.

Grants to Institutes of Technology in Central Universities

Objectives: To provide basic development and special grants to promote innovation in Technical Universities for improving infrastructure.

Target: All eligible Central, State and Deemed Technical Universities are eligible for funding under this head. The number of students and teachers in such institutions would be the criteria for deciding the quantum of funding.

Justification and Anticipated Impact: This would help technical universities to add faculty in new as well as established departments. The grant is provided to add physical infrastructure, to improve academic infrastructure such as laboratory equipments, library books etc. The aim is to improve the overall infrastructure of the university.

Grants to Management Institutions in Universities

Objectives: To promote management education in the university system.

Target: University Departments

Justification and Anticipated Impact: The university management departments would be further strengthened to impart quality education in disciplines of management.

Computer Education

Objectives: To impart information, communication and Computer education through courses and infrastructure development.

Target: Universities and Colleges.

Justification and Anticipated Impact: In order to adopt the latest technology in academic, administrative and financial work it becomes imperative to impart education and training in these fields. It is proposed to start more courses in those areas and also establish and upgrade computer and networking facilities in universities and colleges.

.4 *SAPS/DRS/DSA/CAS in Engineering and Technology*

Objectives: To identify and support University Departments that have do quality teaching/research in Engineering & Technology.

Target: A few University Departments of Engineering & Technology.

Justification and Anticipated Impact: The advent of the Information & Communication revolution has thrown open many virgin research areas that have direct bearing on human society. We need to identify departments that have expertise to undertake such interesting and challenging work and support them by giving funds and appropriate status. The SAP activity gives boost to such activities, especially in the areas of Engineering & Technology.

.5 *Research Projects in Engineering & Technology*

Objectives: To encourage individual research in Engineering & Technology departments.

Target: Engineering & Technology departments in universities.

Justification and Anticipated Impact: To encourage individual teachers to undertake research in Engineering & Technology. This would help in furthering research activities in the country.

.6 *Grants to Women Universities in Technical Courses*

Objectives: To impart professional education courses to women.

Target: Women teachers/students.

Justification and Anticipated Impact: The enrolment of girls in the professional courses is very low. To achieve gender equity in the real sense women should be given the opportunity to contribute and excel in professional areas also. It is, therefore, proposed to start professional courses for women.

Annexure-II

Details of Open and Distance Education Scheme 10th Plan

enth Five-Year Plan (2002-2007): Open and Distance Education System and IGNOU

art-I: Gyan Darshan (TV Channel) & Gyan Vani (Radio Broadcast)

Activities of Gyan Darshan Educational TV Channel and Gyan Vani Radio Broadcast vould be expanded. The 24-hour channel telecasts educational programmes from school evel to tertiary level. The target includes setting up of 40 FM Radio Stations)

(Rs. in crores)

Gyan Darshan Capital Cost	
(a) Digitalisation of Production/Transmission Set-up for Gyan Darshan	10.00
Recurring Cost	
(b) Transmission (Rs.10,000 per hourx24 hrsx365x5yrs)	44.00
(c) Development of Software & Course development	6.50
Gyan Vani Capital Cost	
a) Transmitter Cost@1.5 crores for 25 FM Radio Stations	37.50
Recurring Cost	
) 0.5 crores x 20 stations x5 yrs (Service Lines & Maintenance Staff)	50.00
) Development of software & course development	2.00
Total: Part-I	150.00

ote: Income from other users (Non-MHRD) has not been accounted, and which may art after a year or two.

Part-II: System Development

(System development activities would focus on setting up of a three-tier national network, transformation of print material into HTML mode, development of national programmes, HRD and quality assurance).

(Rs. in crores)

1.	N-NODE (National Network of O & DE) (a) IGNOU with its RCs, (b) IGNOU with SOUs and (c) IGNOU with CCIs	100.00
2.	Capacity Building/Training (HRD)	5.00
3.	Quality Assurance & Accreditation	5.00
4.	Transformation of Print Material into HTML mode (80 programmes of IGNOU & 200 programmes of SOUs) (16800 credits or 280 programmes @ Rs.7500 for each credit=12.60=12.50)	12.50
5.	Development of Professional programmes and national resource material (a) Development of Print Material (1200 credits or 20 programmes @ Rs.1 lakh for each credit) = 12.00 (b) Translation of national resource material in vernacular languages = 0.50	12.50
6.	Research	5.00
7.	Library Resource Building (including IT)	10.00
	Total: Part-II	150.00

Part-III: Special Measures for the Disadvantaged groups and Disendowed Regions
(Special measures includes setting up of regional & study centres, fee concession and development of special programmes).

(Rs. in cores)

1.	Expansion of Regional Centres/Study Centres network in the disendowed regions and areas of SC/ST concentration.	10.00
2.	Incentive Provision	
	(a) Fee concession	70.00
	(b) Deficiency make-up counselling and Development of A/V material	5.00
3.	Special academic/vocational/skill-development/ entrepreneurial programmes for disadvantaged groups and labour force in unorganised sector (development & delivery)	5.00
	Total: Part-III	90.00

Part-IV: Support to State Open Universities(SOUs) & Distance Education Institutes(DEIs)
(Grants for infrastructure Development, ICT Support, Up-gradation of Self-instructional learning Material, HTML Conversion, LAN/WAN. The Plan is also to cover the "external (private) students", of the conventional system, under the ambit of DEIs and SOUs.)

(Rs. in Crores)

1.	Development grants to SOUs & DEIs	
	(a) 2 crore X 9 X 5 (existing SOUs)	90.00
	(b) 1 crore X 8 X 5 (New SOUs) in tenth plan)	40.00
	(c) 0.2 crore X 70 X 5 (for conversion of CCIs into DEIs)	70.00
	Total: Part-IV	**200.00**

Part-V: Indira Gandhi National Open University (IGNOU)
(Focus shall be on construction of campus, setting up of new Schools, Regional Centres, Study Centres and student support services for new 12 lakhs students.)

1.	Phase I&II Construction (IGNOU Campus)	55.00
2.	Setting up of a few New Schools/Disciplines in emerging areas such as Agriculture Sciences, Biotechnology etc.	05.00
3.	Setting up of Community Dev. Centres & information kiosks	10.00
4.	Expansion of Regional Centres (about 15 new) & Study Centres (200 new)	60.00
5.	Faculty Requirement for maintenance of new academic programmes (=1200 credits) planned to be launched in Tenth Plan. (60 faculty as per norms).	5.00
6.	Expenditure on Student Support Services (admissions, counselling, material distribution, examinations and student support staff at RCs, SC, and Headquarters) for the 11 lakhs students enrolled during tenth plan (@Rs. 1500/ student*)	165.00
	Total: Part-V	300.00

Note : * Based on a Cost-Study carried out in 1995 and projected for 2001.

Grand Total: Tenth Plan :IGNOU & Open and Distance Education System

	(Rs. in Crores)
Part-I Gyan Darshan & Gyan Vani:	**150.00**
Part-II System Development:	**150.00**
Part-III Special Measures for Disadvantaged Groups:	**90.00**
Part-IV Support to SOUs & DEIs:	**200.00**
Part-V IGNOU	**300.00**
Grand Total:	**890.00**

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