BRIEF PROFILE OF SCHEMES AND PROGRAMMES OF UNIVERSITY GRANTS COMMISSION



Doc. centre

UNIVERSITY GRANTS COMMISSION NEW DELHI 1991

FOR REFERENCE ONLY

BRIEF PROFILE

OF

SCHEMES AND PROGRAMMES

OF

UNIVERSITY GRANTS COMMISSION



1991

378.954 UNI-----~/ 1 . N. A. Sup Martin & Sectors White N when h last inter of Educational , Personand and Aministration E 5. Sridanibindo Marg, New Delhi DOC. No. 582 Date 26-2-91

CONTENTS

S.NO.	Contents	Page	No.	
1. Intro	. Introduction			
2. Infra	structural Development in University System		2	
- Dev	elopment of Universities		2	
- Sch	ernes of special Assistance		2	
- Oth	er Schemes		3	
- Imp	ortant U.G.C. decisions		3	
- Co-	operative/Inter-University facilities		4	
3. Deve	lopment of Human Resource in University System		8	
- Tea	achers		8	
- Re	search Personnel		13	
- Stu	dents		15	
- Ma	inagement Personnel		16	
4. Aca	demic improvements and Programmes		18	
- Aca	demic Calendar		19	
- Exa	mination Reforms		2	
- Aca	demic Staff College		2	
- Auto	pnomy for Colleges		2	
- Aut	pnomy for University Departments		2	
- Dist	ance Education		2	
- Mas	s Communication		, 2 ;	
- Adu	It and continuing Education & Extension programmes		24	
- Dru	g Abuse		2	
- Pop	ulation Education		20	
- Wo	nen Studies		2	
- HI-T	ech Areas & R&D Efforts		2	

5. UGC 7th Plan Programmes

- Seventh Five year Plan period (1985-90) - Programmes	28
- Seventh Five year Plan period (1985-90) - some achievements	28
6. U.G.C. 8th Plan Programmes (1990-95): Some Directions	34
- Consolideration and Development of Universities/	
Colleges/Autonomous Colleges	34
- Course cunrriculum, Fellowships and Faculty	35
- Extension Activities and other Educational programmes	36
- Programmes for Quality Improvement of Research	37
- Other important Schemes	38
7. A note from Prof. Yash Pal, Chairman, U.G.C.	
on 8th Plan directions	40
Annexures	
1. Brief Review of U.G.C. Activities	47
2. Some Information on Higher Education	53

28

I: INTRODUCTION

The University Grants Commission was set up in 1956 under a Central Act with a comprehensive role "to take in consultation with the universities" or other bodies concerned all such steps as it may think fit for the promotion and co-ordination of university, education and for the determination and maintenance of standards of teaching examination and research in universities."

The system of higher education includes different types of institutions such as General, Agricultural, Technological, Medical universities, Institutes of Management, colleges and institutions known as 'deemed to be universities' etc. Universities are of two types - Central Universities - those established by an act of Parliament and State Universities - those established by an act of State legislature. Colleges are university colleges, government colleges and those established by private bodies.

There has been a steady increase in the number of these institutions over the years as indicated below:

Year	Number of			
	Universities	Deemed Universities	Colleges	
1980-81	112	11	4722	
1989-90	144	25	6912	

The student enrolment has also gone up from 27,52,437 in 1980-81 to 39,47,922 in 1989-89.

There were 39,964 teachers in university departments during 1980- 81. This number rose to 54,973 in 1988-89. These include Professors, Readers and Lecturers. The number of teaching staff in colleges went up from 1,53,377 in 1980-81 to 1,94,095 in 1988- 89, Teachers in Colleges belong to the categories of senior Lecturers, Lecturers and demonstrators. Colleges are mostly of affiliated type, but a move has been made to convert them into autonomous college having academic freedom to formulate courses, curriculum and evaluation; 103 such colleges have been developed so far and an equal number is in the pipe-line.

Teaching, Research and extension are the three basic activities of universities and colleges.

II: INFRASTRUCTURAL DEVELOPMENTS IN THE UNIVERSITY SYSTEM

The Commission has given great emphasis on infrastructural development in the university system i.e. provision for academic buildings, staff quarters, student hostels, equipment, books and journals and such other facilities designed to promote the quality and level of teaching and research as well as to foster corporate life on the campus. The UGC has taken several steps for providing adequate and appropriate infrastructural facilities in the university system under its different schemes as briefly stated below:

2.0 Development of Universities

Development grants are provided to the universities to facilitate the procurement of such infrastructural facilities as are not normally available to them from the State Governments/other bodies supporting them.

In this connection, UGC during the 8th Plan period advised the universities as under:

- (i) To give priority to the strengthening of the infrastructure of existing postgraduate departments by providing adequate academic buildings, academic as well as technical and other supporting staff, modernisation of laboratories, provision/strengthening of workshops and enrichment of library as well as reprographic facilities.
- (ii) Efforts should be made to inculcate the culture of sharing of the available facilities among the desirous users and expensive equipment may be pooled together as central facilities. There should be provision for maintenance and repairing of such equipment.
- (iii) More and more emphasis should be given to make use of modern teaching aid, such as, audio-visual aids, computers and various other electronics gadgets including Telex, Fax, etc.
- (iv) Measures which are crucial to improve the corporate life of the universities have to be taken up on priority basis. Facilities like staff quarters, hostels, guest houses, supply of electricity, drinking water, canteens, roads, health centres, support facilities etc. be the part of the development proposals of the universities.

2.1 Schemes of Special Assistance

UGC has been assisting selected university departments under the programme of special assistance (CAS, DSA, DRS) and COSIST. The assistance provided under these schemes, enable these departments to develop the infrastructural facilities.

2.2 Other Schemes

The infrastructural facilities are also developed in the universities under many other schemes of the UGC, as briefly stated below:

- (i) Financial assistance to universities maintained institutions in Engineering and Technology for the development of higher education and research.
- (ii) Assistance for strengthening of museum in various universities/institutions on a selected basis.
- (iii) Assistance to selected university departments of performing and visual arts for appointment of additional staff, strengthening of studios, purchase of material/equipment.
- (iv) Financial assistance to universities for creating computer facilities and for establishing computer centres.
- (v) Jubilee Grants

The Commission assists universities and institutions deemed to be universities on the occasion of their golden/diamond/silver celebra-tions. It has also been agreed to provide grants to colleges having completed 100 and 150 years. These grants are to be utilised for meaningful programmes of continuing nature, thus adding to the development of infrastructure in the universities and colleges.

- (vi) Assistance to central universities and deemed universities receiving 100 per cent assistance from the Commission for campus development.
- (vii) Assistance to colleges under different schemes of the UGC.

In fact, most of the schemes of the University Grants Commission relating to the promotion of teaching research and extension programmes in the universities add to infrastructural development in the universities/colleges in one or the other way.

2.3 Important U.G.C. Decisions

The UGC has taken some decisions which have bearing in the strengthening of infrastructural facilities in the universities and colleges such as:

 UGC share in the case of buildings for libraries and girl's hostels has been raised to 100% in 8th Plan. (ii) The Commission now also provides assistance to universities for water-supply. electricity, roads, provision of equipment and ambulance for health centres and campus developments.

2.4 Co-operative/Inter-University Facilities

The Commission has established certain facilities in universities to be utilised by teachers and research workers in universities all over the country or in the region as illustrated in the following paragraphs.

2.4.1 Information Centres

The National Information Centres involving the use of computers have been established at Bangalore, Bombay and Baroda and they provide services as under:

- <u>Bangalore</u>: Up-to-date abstracting service in the areas of Physics, Bio-sciences, Chemistry, Mathematics and Earth Sciences.
- Bombay : Sociology, Gujarati, Women Studies, Home Science, Library Science and Special Education.
- Baroda : Economics, Political Science, Education and Psychology.

The objectives of the Centres are to improve the information access to the teachers, research scholars and students and to provide for bibliographic support as also to make available the latest documentation available in the respective disciplines. The Centres provide current awareness services and information and reference services.

2.4.2 Regional Instrumentation Centres

The Commission has assisted the Indian universities for the development of science instrumentation centres. Two Regional Instrumentation Centres have also been set up - one at Bombay and the other at Bangalore. These Regional Centres co-ordinate the functioning of the university instrumentation centres, train resource personnel, provide service and maintenance facilities and design new teaching aids.

2.4.3 UGC Programmes through EMRCs/AVRCs

The University Grants Commission has taken the initiative to utilise transmission time assigned to higher education in the INSAT-1B Satellite T.V. programmes. There are at present two types of Media Centres in the universities as under:

- 1. Audio-Visual Research Centres (AVRCs) to orient the faculty to innovate and take up research in educational technology and to the use of educational media.
- Educational Media Research Centres (EMRCS) to be set up at universities that have gained some experience and shown initiative in the use of Audio-Visual Media (essentially for production and utilisation) combined with innovation and research in educational technology.

The Commission is supporting at present the following Educational Media Research Centres (EMRCs) and Audio-Visual Research Centres (AVRCs) for training and production of software:

2.4.4 Educational Media Research Centres (EMRCs)

- i. Jamia Millia Islamia, New Delhi.
- ii. Gujarat University, Ahmedabad.
- iii. Poona University, Pune
- iv. Central Institute of English & Foreign Languages, Hyderabad.

2.4.5 Audio-Visual Research Centres (AVRCs)

- i. Osmania University, Hyderabad.
- ii. Roorkee University, Roorkee.
- iii. Jodhpur University, Jodhpur.
- iv. Anna University, Madras.
- v. St. Xavier's College, Calcutta.
- vi. Madurai Kamraj University, Madurai.
- vii. Kashmir University, Srinagar.
- viii.Panjabi University, Patiala.
- ix. Manipur University, Imphal.
- x. Devi Ahilya Vishwavidyalaya, Indore.

A Programmes Committee at a high level has been set up to advise on the scope, nature and schedule of the software.

The programme produced by these Media Centres are telecast through INSAT-1B and Doordarshan Network under title "Countrywide Classroom Programme". The telecasting of these programmes commenced with effect from 15th August, 1984. So far about 2000 programmes have been produced.

2.4.6 Inter-University Centres

The U.G.C. is now empowered to establish autonomous institutions for providing common facilities to universities. This became possible by amending its act in 1984.

The primary objective of the Inter-University Centres is to provide, within the university system, front line facilities for research with the participation of scientists and academics from the universities, the institutes of technology and other academic institutions. These Centres are expected to develop sophisticated experimental and other research facilities, the manpower required for experimental science and in addition to promote group activities.

These Centres would function as autonomous organisations, managed by academics and researchers from the participating institutions under the overall guidance of the UGC. The academic programmes of these Centres will be organised around a small core faculty, but at any given time, there will be a much larger number of researchers working at the Centres, the majority of whom will be drawn from other universities/ institutions. For this purpose, these Centres will have a well-designed programme of visitorship.

2.4.7 Existing Inter-University Centres

The University Grants Commission has since established two major common facilities, both as autonomous organisations under the Commission. These are the Nuclear Science Centre at Delhi and the Inter-University Centre for Astronomy and Astrophysics at Pune.

i.Nuclear Science Centre, New Delhi

A Nuclear Science Centre was established in January, 1985 at the Jawaharlal Nehru University Campus as a national research facility. The objective of the Centre is to create facilities in accelerator based research in various branches of pure and allied disciplines such as Nuclear Physics, Atomic Physics, Radio Chemistry, etc.

ii. Inter-University Centre in Astronomy and Astrophysics (IUCAA), Pune

The University Grants Commission established in January, 1988 the IUCAA, with a view to make use of the Giant Meter-wave Length Radio Telescope (GMRT) being installed near Pune by the Tata Institute of Fundamental Research.

iii. Inter-University Consortium, Indore

The University Grants Commission has agreed to set up a third Centre, namely, the Inter-University Consortium for utilization of major National front line facilities of the Department of Atomic Energy. The main objective of the Inter-University Consortium is to provide an institutional framework for the utilization of these major front-line research facilities to students, teachers, researchers from all over the country.

2.4.8 Information and Library Network (INFLIBNET) Project

'INFLIBNET' is a Computer - Communication Network of Libraries and Bibliographical Information Centres. It is a major national effort to improve capability in information transfer and access, that provide support to scholarship, learning, research and academic pursuits. Institutions of higher learning covering all disciplines, R&D institutions and national Organisations will participate in the INFLIBNET.

'INFLIBNET' is a cooperative network and will contribute to pooling, sharing and optimisation of Resources, facilities and services of libraries and information centres in the University System as well as in the R&D complexes. It is a major programme towards modernisation of libraries and information centres in the country, with application of computer and communi-cation technologies. INFLIBNET is a multiple function/ service network. It will offer catalogue based services, database services, document supply services, collection development and communication based services.

There will be a national centre for managing, overseeing and coordinating the affairs of the network and four regional centres (North, East, West and South) which will maintain union catalogue of holdings of libraries in the regions and database of projects, institutions and specialists. As many as 100 Universities and R&D institutional libraries will be designated and equipped to serve as Document Resource Centres for purpose of Document Delivery Service. The first phase of the programme will be 1990- 1992.

2.4.9 The Commission proposes to set up few more such centres during the 8th Plan period (1990-95).

III: DEVELOPMENT OF HUMAN RESOURCE IN THE UNIVERSITIES/COLLEGES

The University Grants Commission has given high priority to the development of teacher competencies, research personnel, students and administration personnel.

3.0 TEACHERS

The Commission has taken the following action so far in respect of teachers :-

- The Central Government on the recommendation of the UGC have revised the pay scales of teachers in universities and colleges in order to attract and retain talent in the teaching profession.
- (2) The Commission also prepared a code of professional ethics of university and college teachers. The Code of Ethics has been circulated to the Vice-Chancellors/Principals of the colleges for its adoption.
- (3) A² system of Performance Appraisal of College and University teachers has also been evolved in discussion with teachers' organisations. The stipulation was that the system should be open, participatory and data-based.

The guidelines in this regard have been circulated to the Vice- Chancellors and Principals of colleges in the country for adoption.

(4) Eligibility test for recruitment to the post of Lecturers in Universities and colleges

In pursuance of the revised pay-scale scheme notified by the Govt. of India, Ministry of Human Resource Development that only those candidates who besides fulfilling the minimum academic qualifications prescribed for the post of lecturer have qualified in a comprehensive test specifically conducted for the purpose, will be eligible for appointment as lecturers, the Commission decided that recruitment to the post of lecturer should be made by the universities/colleges from amongst the candidates declared eligible in a test conducted at national/state level. It has also been decided that the qualifying test will only be eligibility test and the universities and colleges can follow their own selection procedures. The test is only for the first appointment as lecturer. Appointments after 1.1.1990 will be only from the test qualified candidates. State Governments are free to conduct their own test or follow the national level test of UGC/CSIR/GATE. However, the state test will be accredidated by the UGC. Such tests have been conducted by the UGC in Humanities and Social Sciences and in Sciences in collaboration with the C.S.I.R.

(5) Orientation of Teachers

The University Grants Commission has evolved a scheme called Academic Staff Orientation Scheme for orientation of newly appointed Lecturers in universities and colleges. Accordingly, the Commission identified 48 Academic Staff Colleges at different universities with a view to provide : (a) orientation courses for newly appointed teachers; and (b) refresher courses for in-service teachers. Each Academic Staff College is expected to organise 6-8 orientation programmes of four week duration in a year.

During 1989-90, 191 orientation courses were organised by 45 Academic Staff Colleges. In addition 93 University departments/institutions organised Refresher courses for in service teachers. During 1990-91, about 2100 teachers were offered courses by July, 1990. 16500 more teachers are expected to participate in these courses by March, 1990. 150 Universities departments/Institutions have been identified for programising refresher courses in 1990-91.

(6) Travel Grants:

U.G.C. has been paying travel grants to teachers from universities and colleges for participation in conferences both in India and abroad.

(7) Staff Quarters

Additional allocations over and above the plan allocations were made during the 7th plan period to universities for staff quarters particularly intended for teachers recruited from other States.

(8) Visiting Faculty

- (i) The Commission has introduced the following schemes/ programmes to promote the development of teachers and researchers in the Universities:
 - Visiting Professorships
 - Visiting Scholarships
 - National Lecturerships
 - Visiting Associateships

The esstential features of these Schemes are:

1. Visiting Professorships

Distinguished Professors are appointed as Visiting Professors in universities for a period of

3 months to one vear to deliver lectures and take part in other academic activities of the universities. From 8th Plan the Scheme has been discontinued.

2. Visiting Fellows

Distinguished persons are appointed as Visiting Fellows for a period of two weeks to eight weeks to deliver lectures etc.

3. National Lecturers

This programme enables outstanding teachers and researchers to visit universities/colleges for delivering a series of lectures in their fields of specialisation and to participate in academic programmes of the host institutions

4. Visiting Associateships

Under this scheme outstanding university/college teachers, normally below the age of 35, engaged in research are to work for short periods at other University Centres/Research Institutions/National Laboratories having special facilities for their work. Associateships are available for one year, three years and five years and the number of slots available is 100, 150 and 150 respectively.

The expenditure involved on travel, board and lodging as also on honorarium in respect of Visiting Professorships, Visiting Fellows, National Lecturers and Visiting Associateships is met out of the grants of the U.G.C.

5. Emeritus Fellowship

The scheme is intended to utilise the services of highly qualified and experienced superannuated Professors in Universities who have been actively engaged in research and teaching improvement programmes of the UGC in the preceding yars to enable them to pursue active research in their field of specialisation as also to help the Commission in monitoring of educational programmes initiated by the University Grants Commission.

The fellowship will be available ordinarily for a period of two years but not beyond the age of 65 years. The number of fellowships is 60.

6. Career Awards:

The purpose of the scheme is to identify young talented teachers in science/engineering subjects and in humanities and social sciences having proven ability of research in their areas of specialization with a view to promote their research career by enabling them fo devote their efforts and energies early in their career for research and study with minimum teaching responsibilities. These awards are generally given to lecturers/readers who are not more than 40 years of age. The number of annuai awards given under the scheme is 35 (20 in Science/ Engineering and 15 in Humanities/Social Sciences). The duration of the award is three years. The Commission pays the awardees their full salary and allowances. In addition, the Commission provides each awardee a research grant upto rupees one lakh and two or three research fellows during the tenure of the award. The awardees also participate in teaching programmes of the department.

7. Teacher Fellowships

These are now available for a period of one year either for doing M.Phil or completing Ph.D. Further, awards will now be made by universities in accordance with the norms and guide-lines laid down by the Commission.

8. Retired Teachers

The Commission has been assisting superannuated teachers to under-take major Research projects. Under the scheme, such teachers are also required to teach 4-6 hours a week in a college/ university.

(ii) Exchanges under the Cultural Exchange and other Programmes

1. Cultural Exchange Programmes

Programmes of Cultural Exchange are intended to promote cultural, educational and scientific co-operation between India and other countries. These programmes relate generally to exchange of visits of teachers for study-cum-lecture, exchange of views, developing contacts, development of bilateral links between institutions in the two countries, organisation of joint seminars etc. Visits under these programmes range from four to twelve weeks. These programmes have proved to be useful to the teachers in keeping themselves abreast of advances made in their fields of specialisation and in exploring possibilities of developing collaborative programmes. Such programmes at present are under operation with 48 countries. The Commission is gradually shifting emphasis in the cultural exchange programme from the general exchange of scholars to the programmes of developing institutional linkages in specified areas. Some examples of bilateral collaboration are as under:

 bilateral collaboration programmes are there with countries such as the USSR, F.R.G., G.D.R., Bulgaria, Czechosalvakia, Hungary, Poland, France, Yugoslavia, Italy etc.

- Academic link inter-change scheme between India & U.K.;
- Indo-US Fellowship Programme:
- Commonwealth Academic Staff Fellowships and Scholarships.

2. SAARC* Chairs, Fellowships & Scholarships

At the second SAARC** Summit held at Bangalore in November, 1986, the Heads of State/Governments decided that it was essential to promote increasing cross fertilisation of ideas through greater interaction amongst students, scholars and academicas in SAARC countries. They, therefore, directed that a concrete programme of exchange of scholars be formulated and action taken by instituting scholarships, Fellowships and Chairs in the Universities of the Member Countries. Pursuant to this decision, details of the scheme were finalised at a meeting of officials from SAARC countries held in New Delhi in February, 1987. The Government of India, subsequently convened a meeting on SAARC Chairs, Fellowships and Scholarships in New Delhi in September, 1988 to finalize modalities for the implementation of the Scheme.

SAARC chairs in India are in Applied Economics in the universities of Poona and Delhi and are to be given to outstanding scholars for a period of two-three years. The number of chair is one.

SAARC Fellowships are meant for experienced scholars with published work of high quality and are awarded for a period of one year. In India, the fellowships are in the areas of: Agriculture; Applied Economics; Education; Environment; Language & Literature; Mass Communication; Sociology; and Transportation Engineering. The number of fellowships is six.

SAARC Scholarships are meant for pursuing higher studies leading to M.Sc. and Ph.D. degrees. In India, the areas in which the scholarships are available are Bio-Chemistry, Food Technology, Home Science, Business Administration and Social Work. The number of scholarships is 12.

, fi

^{*} SAARC - South Asian Association for Regional Cooperation.

^{**} Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka.

3. Academic Link Interchange Scheme

This programme, which is being implemented in collaboration with the British Council, provides for the development of linkages in specified areas between institutions of higher education in India and the U.K. It involves the exchange of faculty from identified participating institutions for a period not exceeding 20 weeks each. The visits have the following objectives:

- (a) Joint Research
- (b) Joint Publications
- (c) Curriculum and Course Development
- (d) Academic/Professional/Administrative Staff Exchange Development.

25 areas have been identified for collaboration, programmes.

4. Collection of Source Material for Research Work in UK and other Countries

The Commission provides travel and maintenance expenses to senior Indian scholars in humanities and social sciences for their visit to UK for a period of 6-8 weeks to enable them to collect material for their research work, which is ordinarily not available in India.

The Commission also provides travel grant to teachers for their visit to foreign countries for

- collection of material for their research work or to avail offer of a fellowship or assistance from an agency from that country where the scholar has been offered partial or full financial assistance for his maintenance.

3.1 RESEARCH PERSONNEL

The Commission has taken several steps to provide research man-power in Indian Universities.

1. Junior Research Fellowships

The Commission provides assistance to universities for implementing the scheme of Research Fellowships under "Any given time" basis. Since 1984 this award is made only to those who qualify in a National Level Test conducted by the UGC/CSIR for the purpose.

Junior Research Fellowships are also made available under Special Assistance Programmes like CAS, DSA, DRS and Major Research Projects etc.

In order to provide fellowships to all those candidates who had qualified in the national test, the Commission agreed to provide supernumerary/personal fellowships over and above the allocated quota. Ten per cent of the total number of junior research fellowships available with the universities on 'any one given time basis' are reserved for students belonging to Scheduled Caste/Tribe communities. Besides, the Commission is also awarding annually 50 junior research fellowships exclusively to scheduled caste/tribe candidates. Conditions are relaxed for the selection of SC/ST candidates. The value of JRF has been enhanced from Rs. 1000/- to Rs. 1800 pm and Rs. 1200/- to Rs.2200/- p.m.

The Commission awards 60 research fellowships every year in engineering and technology to enable the students to undertake advanced study and research in their fields of specialization.

The Commission has instituted 25 scholarships for meritorious postgraduate students belonging to scheduled castes/tribes and backward communities of border hill areas in order to promote the channels of academic communication between students of these regions and the rest of the country.

2. Research Associateships

Under the scheme of research associateships, the awards are made by the Commission centrally every year with a view to provide an opportunity to research students and teachers who have shown talent and competence to take up research work independently or on project-assignments in science, humanities including social sciences, and engineering and technology. The total number of awards is 150 annually including five each in Gandhian Studies, Nehru Studies and National Integration.

The Commission centrally awards 40 research associateships to the candidates belonging to scheduled caste/tribe communities.

The Commission has also earmarked 30 research associateships annually for the physically handicapped scholars including the blind, deaf and the mute.

3. Part Time Research Associateships

U.G.C. has also instituted part-time Research Associateships for Women, with a view to provide an opportunity to talented research scholars who have shown extra ordinary talent and competence to take up research work independently on project assignments. The number of such Associateships is 40 to be awarded annually.

The **emoluments** of full time Research Assocates have also been revised to Rs. 2200/- (A); Rs. 2700/- (B); Rs. 3200/- (C); and Rs. 3700/- (D). Part time research associates are awarded in two slabs and carry emoluments at Rs. 1800/- p.m. or Rs. 2200/- p.m.

4. J.R.F. for developing Countries:

The Commission is providing financial assistance to the talented scholars of developing countries for doing research in Indian universities in science, engineering & technology, humanities and social science subjects. The Commission awards annually 20 junior research fellowships for research leading to M.Phil/Ph.D.

5. Research Scientists

The scheme is intended to build a cadre of research scientists in Indian universities to promote high quality research in Science, engineering and technology and Humanities including Social Sciences by providing opportunities to persons with outstanding merit and zeal for creative work. The Commission has created 100 positions of Research Scientists in Science and 100 positions in the Humanities and Social Sciences subjects in categories A, B & C corresponding to the grades of lecturers, readers and professors respectively generally in the ratio of 60:30:10. The persons to be considered for research scientist positions must have an outstanding academic/research career with a Ph.D. degree and research experience of not less than two years after the award of Ph.D. for research scientist 'A', five years for scientist 'B' and ten years for scientist'C'. The age llmit for Research Scientist'C' has been fixed as 55 years. In addition to the salary, the scientist gets Rs. 5000/- p.a. as contingency grant and other allowances as are admissible to university temporary teachers appointed on long term basis. Persons are selected centrally under the scheme for a period of five years.

The performance of an awardeee is to be assessed and monitored vigorously by the Commission before the five-year period ends. If the research work is found to be of excellent nature, the award could be continued at the same level or the scientist could be even promoted to the next higher level for another contract period and in case the progress is not found satisfactory it could be withdrawn.

3.2 STUDENTS

- The Commission has requested the universities for provisiu:. or basic facilities to students, as under :
 - i) Glaring deficiencies with regard to student amenities may be made good without delay and an effective machinery be created for removal of students' grievances.
 - ii) It may be ensured that students eligible for scholarships and other incentives receive them in time.
 - iii) A code of students' discipline may be evolved with the help of students and this may be duly implemented. The code may be incorporated in the statutes of the university.

 It may be ensured that unauthorised persons do not take shelter in students' hostels and strict discipline is enforced in the hostels.

Universities were requested to bring the above mentioned steps to the notice of all the affiliated colleges as well.

The Commission has agreed that a mechanism should be evolved to ensure that degrees are given to the students in time without waiting for formal convocation to take place. The degree recipients may, however, sign exhortation which is carried out during the normal convocation ceremony. The above decision of the Commission was accordingly brought to the notice of the universities for guidance and necessary action.

3.2.1 Construction of Hostels:

The Commission has been giving high priority to the construction of hostels for students in universities and colleges. Provision of hostel facilities is one of the important items included in the general programmes of development of universities and colleges.

In the interest of social justice, the Commission has laid down that all universities assisted by it to construct students' hostels would be required to reserve 20 per cent of the seats in such hostels for students belonging to Scheduled Castes and Scheduled Tribes.

The Commission has also laid down that its assistance for construction of hostels in backward areas would be 75 per cent of the total expenditure as against 50 per cent available for other areas.

The Commission has also been encouraging the construction of dormitories and/or double or triple seated rooms rather than single seated rooms in the hostels in order to keep the per student cost low.

The Commission has agreed to provide 100% grants for Women's Hostels. It has also bee agreed to strengthen Health centres in the Universities.

3.3 MANAGEMENT PERSONNEL

Some of the problems related to the internal management of University are listed below :-

- Rigid traditional structure of University as an institution
- University rules and statutes vis-a-vis academic growth
- External influences and interference

- Lack of incentives, training and motivation
- Bureaucratic tendencies of the Universities' administration and red tapism; and
- Slow decision making due to procedural complicacies.

In case of Assistant Registrars, Deputy Registrar, and Registrars/ Controller of Examinations/Finance Officers, the scales were revised with effect from 1.1.1986 and these are at par with university lecturers/readers/professors. In respect of category mentioned above, the revision has been implemented in central universities and deemed to be universities receiving cent per cent central assistance and the recommendations have also been forwarded to all other universities. Another important step taken for providing training to the officers working in universities has been to organise orientation courses from time to time at NIEPA and other places. These courses have been found beneficial to them in understanding and implementing the UGC programmes.

IV : ACADEMIC IMPROVEMENTS AND PROGRAMMES

The Commission has taken a number of decisions to foster better standards of education such as framing the regulation regarding the qualification of teachers or providing guidelines for minimum examination reform, or advice to the universities on the number of working days and academic calendar. The Commission has also been pressing for modernisation and relevance of curricula and methods of teaching which require students to do assignments, tutorials, projects or field work - exercising their initiative and creativity. A number of journals have also been started i.e. journals of Education, Physics, Chemistry, Mathematics and Biology, particularly to help teachers to improve their professional performance.

At the undergraduate stage a major programme of reform is the redesigning of courses by which a socially relevant or job-oriented course replaces one of the traditional subjects. In a number of colleges, courses in electronics, computer science etc., have been introduced. Computers have been provided to nearly 800 colleges in order to enrich the knowledge of students of various disciplines. A "country-wide classroom" programme is telecast for two hours everyday. For this purpose, television sets have been made available to about 2,000 colleges. Universities keep on revising the curricula through the Boards of Studies based on the growth of the subject concerned and feedback from the employment market. The UGC has also set up 27 Curriculum Development Centres in different subjects to prepare model curricula for undergraduate and postgraduate courses. Curricula have already been prepared and brought out in many subjects and discussed in various forums. They have also been circulated to universities.

The rigidity of the affiliating system deprives the good teachers of the opportunity to take the initiative for creative and innovative activities. Some universities have in the past few years shown signs of flexibility. There are at present about a hundred autonomous colleges. Autonomy for a college implies that the college and its teachers assume full responsibility and accountability for the academic programmes they provide, for the content and quality of their teaching and for the admission and assessment of their students. An autonomous college is expected to be a pace-setter for other colleges in the system.

The Commission has also taken a number of measures to support research programmes of individual teachers as well as of departments and to improve the infrastructure of selected departments to enable them to raise the standards of postgraduate education and attract projects from many national agencies in relation to areas of national importance. A cadre of research scientists in all subjects in the lecturers, readers and professors grades has also been created so as to make research and excellence-oriented careers an attractive proposition for talented young men and women.

It is not possible for a university to set up with limited funds large facilities with costly infrastructure. Therefore, the Commission is creating major research facilities in the university system with autonomous management and for cooperative use of all universities. Such as, the Nuclear Scinece Centre, set up on the Jawaharlal Nehru University Campus in Delhi, an Inter- university Centre in Astronomy and Astrophysics on the Poona University campus which will work in collaboration with the TIFR and the third is the consortium of Universities at Indore. Linkages are being created or strengthened with other institutions and laboratories to have more national centres of research functioning in close collaboration with the universities.

In order to enable universities to have meritorious research fellows, the UGC has since 1984 been holding an eligibility test for Junior Research Fellowships and since 1988 it has been collaborating with the CSIR in respect of science subjects. Junior Research Fellowship can only be awarded to those who have qualified in such national tests.

Many university departments have good infrastructure for quality education and research and attract meritorius students from all over the country. This is more so after the introduction of national level tests for research fellowships and also for admissions into various courses in several universities.

For taking full benefit of the various developments it may be neessary to take additional measures of academic improvement like granting autonomy to colleges and university departments, examination reforms, following an academic calendar, orientation of new teachers, refresher courses etc. The universities have also a special role to play in the national mission of eradication of illiteracy, distance education and mass communication. Significant features of these programmes alongwith relevant issues have been highlighted in the following paragraphs.

4.0 Academic Calendar

The U.G.C. has intimated the universities that:

(i) It would be ideal if there could be a National Academic Calendar for all the universities in the country. However, to begin with, each State should have an academic calendar to be followed by all the universities in the State for their regular students in all the faculties and for all the courses.

- (ii) A beginning be made by implementing an academic calendar in all the States by the academic session of 1990-91 and towards this end appropriate Statutes/Ordinances are finalized in time incorporating the provisions of the statutory academic calendar. The statutes may also provide for the following
 - A minimum of 180 teaching days in the universities and colleges every year;
 - Last date for admission;
 - Last date for the completion of the examination;
 - Last date for the declaration of results.

4.1 Examination Reforms

In 1974 the UGC launched a programme of Examination Reforms with a view to improving the reliability, validity and objectivity of evaluation and with a view to bringing about close integration of teaching, learning and evaluation. The main emphasis of the programme is on the implementation of specific measures like continuous internal evaluation, development of question banks, grading system and semester system. In addition to these long-term measures, the Commission advised the universities to implement certain minimum examination reform measures relating to syllabus/ guestion papers and conduct of examinations.

While the progress of implementation of the Examination Reform Programme is generally slow, it is working well in Unitary Universities, autonomous colleges and some university departments apart from professional institutions. Many of the concepts such as, objective and short-answer type questions have been widely accepted and entered into the examinations. However, the programme could not have the expected success in the affiliating universities primarily due to 'inadequate planning and preparation before launching the programme.

4.2 Academic Staff College (ASC)

With a view to implement various provisions of the National Policy on Education(1986) and the Programme of Action, the Commission formulated a scheme called Academic Staff Orientation Scheme for orientation of newly appointed lecturers in universities and colleges.

To begin with, 48 universities were identified by the Commission during 1987-88 for conducting phase-I Orientation Programme for newly appointed lecturers in universities and colleges. Each ASC is expected to organise 8 Orientation Programmes of 4 weeks duration in a year and the number of participants may be 40 representing different disciplines at a time. The catchment area of each ASC has been determined keeping in view the geographical proximity, responsibility of a university as an affiliating institution and the national outlook. Each ASC is required to enrol 85-90% of teachers from its catchment area and the remaining 10-15% of teachers from outside the state on an all india basis.

ASCs also act as nodal agencies for conducting subject- oriented Refresher Courses for inservice teachers either by themselves or at some selected university departments/institutions which have achieved excellence in particular disciplines. So far 150 universities/departments/ institutions have been identified by the Commission on regional basis to organise refresher courses in the disciplines in Science, Social Sciences and Humanitiés. Each Centre is expected to organise 2-5 refresher courses of the duration of 3-4 weeks in a year and the number of participants may be 40.

The Commission in collaboration with the National institute of Educational Planning and Administration has been organising Seminars-cum-Workshops for the Directors of ASCs to discuss the progress of academic staff development and to work out methods of effective planning and management of a ACSs.

4.3 Autonomy for Colleges

The important features of the scheme are :

- The teachers of the College have freedom to determine courses of study and syllabi, prescribe rules for admission subject to reservation policy of the Govt. and evolve methods of
 evaluation and conduct of examinations;
- ii) The University, the State Government, the UGC and the college are parties to develop a college as autonomous institution;
- iii) The college will have to earn autonomous status continuously and not once for ever;

The performance of the college as autonomous institution is to be reviewed twice i.e. at the end of 3rd year and again at the end of 5th year to determine continuance or otherwise of autonomy;

iv) The university will accept decision of the college Academic Bodies regarding courses, syllabus, results etc. and award the degree.

4.3.1 Efforts made by the UGC:

 The Chairman, UGC through his letters to the Chief Ministers solicited their assistance and intervention with regard to implementation of the scheme in the States. The matter has also been discussed at the CABE meetings.

- ii) Requests at various levels were made by the Commission to the universities for expediting the implementation of the scheme. The Universities were requested to get the Acts amended and also formulate statutes for regulating conferment of autonomy. Requests were made to the State Govts. as well in this regard.
- iii) Before the issue of the revised guidelines, there were 19 autonomous colleges and the scheme has now been implemented bringing the no. of autonomous colleges to about 104, an equal number is in the pipe line.

The Universities have a major role to play in the development and working of autonomous colleges. They can discharge this leadership role in a very constructive manner by:

- Providing experts on the boards of studies and at the academic council to help the colleges revise the syllabi and curricula and to develop new courses;
- (ii) accepting the revision of syllabi/curricula by the autonomous colleges and for that matter formulating expeditiously necessary statutes;
- (iii)accepting the results announced by the autonomous colleges and not differentiating for purposes of admission the students passing out from such colleges:
- (iv) Working out modalities for expeditious decisions in the case of students desiring migration from autonomous colleges to other colleges of the university or vice-versa.
- (v) reviewing the university statutes concerning composition of Governing Bodies of Autonomous Colleges, wherever formulated, so as to make such bodies truely representative of different interests - management, Govt. University and College Teachers on the lines suggested in the UGC revised guidelines.
- (vi) getting universities Acts amended, statutes formulated and expediting examination of proposals to enable achievement oftarget laid down under the Programme of Action, N.P.E.
- (vii) holding review meetings with Principals and/or members of governing bodies of autonomous colleges.

One of the major reasons for slow pace of implementation of the scheme is the lack of provision of autonomy in the acts of the universities as also of appropriate statutes.

4.4 Autonomy for University Departments

Under this scheme selected departments, schools and centres in the University system can be granted academic autonomy as well as the necessary administrative and financial autonomy needed for achieving the objectives of the academic autonomy.

The University Departments recognised as Centres of Advanced Studies (CAS) and those receiving special assistance from the UGC under Departments of Special Assistance(DSA), Stregthening of Infrastructure in Science and Technology (COSIST), Area Studies, Media Centres, etc. may be granted autonomy by the concerned universities in the first instance. Simultaneously steps will be initiated to confer autonomous status to other departments also. The autonomy will be granted on five year term basis which can be revoked in case there is convincing evidence about the misuse of the autonomous status.

Each autonomous department will have a departmental council with varying composition, with a specific term of membership. The Department will also constitute an appropriate mechanism to evaluate its own performance. Each autonomous department will, keeping in view the general policy of the University, frame regulations regarding admi ssions, preparation of syllabi, methodology of evaluation and examination, identify thrust areas for research and formulate necessary financial and administrative arrange ments including processing of cases for recruitment of faculty.

4.5 Distance Education

There are 33 universities in the country which have system of education through correspondence courses for various programmes. The Indira Gandhi National Open University (IGNOU) has been assigned the task of coordination of the programmes.

4.6 Mass Communication

The University Grants Commission's "country - wide class room" project is a logical outcome of the phenomenal development of the electronic media and its availability for education. The Programmes are of enrichment type meant for undergaduate students and they are in english for the present. They function as a spring board in motivating learning, bringing home exciting advances and epoch making events, impart an improved understanding of the world around us and help broadening mental horizons. There are also special programmes for teachers in higher education to enable then to handle their job more effectively.

Imported programmes are being replaced by Indian ones. Now as much as 65% -70% of the programmes content is Indian.

The Educational Media Research Centres have organised workshops to expose the academics and persons associated with the media Centres, for programmes production, use of equipment, effective utilisation of the broadcasting medium as well as software making.

Distance learning could be made more effective through making available video cassettes containing course materials to institutions. The materials could also be used for self instruction and put out as Video /TV broadcast. In this context, the UGC has taken up a project on 'non-broadcast mode educational material'. 15 subjects have been identified for production of model video course material and 8 production centres have been identified in this connection.

4.7 Adult & Continuing Education and Extension Programmes through University System.

The University Grants Commission long back recognised 'extension' as the third dimension of the roles of the university system and issued guidelines to universities.

The Universities and colleges will:

- be expected to give extension work the same importance as they do to instructional work. Extension programmes will include mass education as well as systematic courses of continuing education including post-literacy.
- maximise involvement of students and consider literacy work as study service.

Literacy being indispensable component of human resource development, promotion of literacy is identified as one of the national missions. Under the programme of National Literacy Mission, a very important task was assigned to the university system.

The guidelines on adult education programmes were revised emphasising upon the universities to adopt area-development approach and to take up critical development goals which should broadly include:

- eradication of Witeracy including the mass programme for functional literacy and post-literacy programmes;
- continuing education programmes viz. development of basic learning skills and professional know-how;
- population education, legal literacy, consumer's education, women's development, environment-education etc.;

As a result of new guidelines, the area-based programmes were approved for 85 universities and colleges after discussion with the representatives of the universities:

- Adult Education Centres;
- Population Education Activities through Adult Education Centres and by formation of club of the students;
- Continuing Education Programme both institution-based and community based;
- Setting up of Jan Shikshan Nilayam to institutionalize post-literacy and continuing education.

The UGC assistance for staff and the programme cost under the scheme is admissible upto 1995 and therefore, the universities have been requested to secure commitment of the State Government concerned for taking over liability after the UGC assistance ceases. The Commission has allowed employment of 100 substitute teachers to enable as many incumbent teachers to take part in mass literacy programme under the auspieces of Bharat Gyan Vigyan Samiti - a voluntary organisation.

4.8 Drug Abuse

Government of India, (MHRD) suggested that the UGC may examine the possibility of introducing curricula related to the prevention of drug abuse meant for teachers at the B.Ed. and M.Ed. level and further suggested that:

- a conference of Vice-Chancellors of different universities may be organised to consider introduction of such programmes which will create awareness in the prevention of drug abuse.
- (ii) curriculum and training programme be developed which will create awareness and help in the prevention of drug abuse.
- (iii)The first meeting of SAARC Technical Committee on the prevention of drug trafficking and drug abuse held at Islamabad (Pakistan) from April 12-15, 1987 interalia recommended that:

a)SAARC member countries should promote community awareness and educational programmes for the prevention of drug abuse.

b)SAAR C member countries should promote training and research programmes in all areas of drug abuse, prevention and control.

c)Preventive education, counselling and guidance, and community support should be integrated.

The Commission has so far taken the following steps with regard to the issues raised above:

(i)The universities have been apprised of the necessity for checking the use of drugs by students.

(ii) The Vice-Chancellors were requested that the universities take appropriate steps to prevent and curb drug abuse amongst the students and create awareness about this menace amongst the non-students with the help of Adult and Continuing Education and Extension Department/Centres.

4.9 Population Education

The Commission has been assisting universities and colleges for the promotion of population education programmes through the establishment of population education clubs etc. besides setting up Populaton Education Resource Centres (PERCs) under the UNFPA - UGC project. The PERCs provide support to universities and cleges in the implementation of the population education activities.

4.10Women Studies

The Commission has been assisting the universities to create awareness and consciousness in both men and women by helping them to understand, recognise and acknowledge the multi - dimensional role played by Women in Society, for taking up programmes on women's studies have been set up in 19 universities and 7 colleges. A standing committee of the U.G.C. monitors the implementation of the programme.

4.11Hi-Tech Areas and R&D Efforts

1. COSIST Programme

The basic objective of the scheme is to help selected Science and Technology deptts in universities/ Institutions which have already achieved high standards comparable to their counter-parts elsewhere in the developed countries by providing them with such infrastructural inputs which are crucial for strengthening the teaching and research activities. Ill departments have merited support under this scheme. The programme is being executed in consultation with a high power standing committee.

2. Superconductivity

The programme was initiated in June 1987. 34 Universities/Departments/Institutions are supported under the programme. The Programme has given opportunity for Infra and

inter-departmental collaboration with other laboratorles/Institutions which has created a new sense of group activity.

3. National Accelerator User's Committee

The facilities available at the variable Energy Cyclotron, Bhabha Atomic Research Centre (BARC), Calcutta are being utilised by university Scientists.

4. Other Misc. Programmes

- a) Multi-disciplinary teaching and training in Bio-technology;
- b) Development of Ocean Sciences and Technology;
- c) Atmospheric Sciences;
- d) Indian Middle Atmospheric Programme.

5. Major and Minor Research Programmes

The Commission has been assisting unlersities for undertaking Major and Minor Research projects in Humanities, Social Sciences, Sciences, Engineering and Technology.

V : U.G.C. 7TH PLAN PROGRAMMES

5.0 Seventh Five Year Plan Period (1985-90) - Programmes

The main features of the programmes during 7th Plan to impart the necessary dynamism to the higher education system were through the following strategies:

- Consolidation and Expansion of Institutions
- Development of Autonomous Colleges and Departments
- Redesigning of Courses
- Training of Teachers
- Strengthening of Research
- Improvement in Efficiency
- Creation of structures for co-ordination at the State and National levels
- Mobility of teachers/students.

5.1 Seventh Five Year Plan-period (1985-90) - Achievements:

Keeping in view the thrust areas in higher education guidelines were formulated by the UGC for different schemes indicating inter-alia the financial pattern, monitoring mechanisms etc. These guidelines were given wide circulation in universities and colleges for enabling the universities and colleges to formulate their proposals. Seminars and workshops were also organised to promote a better understanding of the guidelines.

The implementation of various schemes is indicated in the Annexure-I. Some important aspects of implementation are briefly given below.

- 1. Consolidation and expansion of Institutions
- a) Normal developmental grants were sanctioned to all eligible universities to meet their requirements of staff, books/journals, equipment and building etc. Implementation of these schemes were later reviewed by expert committees who visited these universities after July, 1988.
- b) Grants were sanctioned to colleges under the schemes of Basic, Undergraduate, Postgraduate and Single faculty schemes. Proposals of most of the eligible colleges were approved.

Conditions for assistance were relaxed in respect of colleges having larger concentration of SC & ST students as also colleges located in the rural and backward areas as well as women colleges. Selected colleges were also assisted under the quality programmes (COSIP; COHSSIP).

c) In order to improve the libraries and laboratories and to remove obsolescence, universities were provided special grants for books (ranging from Rs.7.00 to Rs.10.00 lakhs) and equipment (ranging from Rs.25.00 to Rs. 40.00 lakhs). Deemed Universities were assisted for equipment ranging from Rs.4.00 to 14.00 lakhs.

The Commission also agreed to provide grants for similar purposes to colleges. Grants amounting to Rs.25,000/- were paid to each college for books.

- d) Model conditions for affiliation of colleges, guidelines for college development councils and planning and monitoring boards were circulated to universities/colleges and State Governments.
- e) Entrance examinations for admissions were introduced in many universities at the undergraduate and post-graduate levels particularly in professional subjects.

2. Development of Autonomous Colleges

Several steps were taken to motivate universities, colleges and teachers for participation in the programme.

104 colleges (43 Tamil Nadu, 19 Andhra Pradesh, 29 M.P; 5 Rajasthan; 5 Orissa; 2 Gujarat and 1 Uttar Pradesh) were accorded autonomous status. Proposals of over 100 colleges are in the pipe line. UGC guidelines provided for a monitoring mechanism at the UGC, University and college levels.

3. Design of Courses

27 Curriculum Development Centres were established in different subjects in Indian Universities. Reports were circulated to the universities.

4. Teachers' Training

UGC approved the establishment of 48 Academic Staff Colleges of which 46 became functional.12305 newly recruited lecturers were given orientation by these colleges till July, 1990. 150 university departments/institutions were identified for organising Refresher Courses. 8861 teachers participated in the Refresher Courses till July, 1990.

UGC has included the organisation of seminars, symposia etc in its scheme of un-assigned grants to universities with a view to expedite organisation of such activities by the universities.

5. Research in Universities

Several steps were taken to promote research in universities including the followings:

- a) UGC has provided funds to universities under different schemes for promotion of research such as:
 - Quality improvement and Special Assistance Programmes
 - -, Removal of obsolescence
 - COSIST
 - Research Scientists etc.
- b) National Information Centres (M.S. University of Baroda, S.N.D.T. Women's University and I.I.Sc. Bangalore); Regional Instrumentation Centre (Bombay University, I.I.Sc. Bangalore) and Inter-University Centres (Nuclear Science Centre at Deihi; Astronomy and Astrophysics, Pune; Inter-University Consortium, Indore) have been set up as coperative facilities.
- c) UGC and UGC/CSIR conducts National Tests for the award of JRF's since 1985.
- d) The fellowship amounts have also since been revised.
- 6. Improvement in Efficiency
 - a) 104 universities and 800 colleges were provided computer.
 - b) Besides, computerised information Centres, a project entitled 'INFLIBNET' has since been formulated for networking of Libraries.
- 7. Creation of Machineries for Co-ordinated developments
 - a) State Councils of Higher Education

One such council has since been set up in Andhra Pradesh. Similar councils are likely to be set up in M.P., Bihar and Orissa. Matter is under consideration of many other states.

b) Accreditation and Assessment Council

The project on the establishment of National Accreditation Council is under consideration of the Commission.

8. Mobility

Universities are being persuaded to admit students particularly in the professional, postgraduate and research level courses on an all India basis, through an admission test. Such tests have been introduced for admissions in specialised courses like Bio- technology, electronics etc.

Recruitment of lecturers at their first appointment in universities/colleges will be through a _ qualifying test. Modalities of such tests were worked out.

A Committee has also been constituted to suggest modalities for counting the past services of teachers.

UGC has provided funds to universities for building staff quarters essentially for those who are from out-side the state. This provision was over and above the normal allocation of the Seventh plan.

9. Research and Development

- a) 27 Curriculum Development: Centres were set up during 7th Plan period. Four journals in science education are being brought out regularly by the UGC besides a Journal of Higher Education.
- b) 193 departments are participating in programmes of special assistance CAS -41, DSA-97 and DRS-55.
- c) 110 Departments were assisted under 'COSIST' Programme.
- d) Guidelines on Decentralised management with Autonomy were circulated to universities;
- e) Teachers are given greater opportunities to pursue research through schemes of Minor and Major Research Projects;
- f) JRF's are awarded on the basis of an all India qualifying Test. Emoluments of JRFs, RAs and Research Scientists have been revised.

- g) Research Scientist's scheme has been reviewed. 200 Research Scientists positions are awarded at the level of Professors, Readers and Lecturers in Humanities, Social Sciences and Sciences etc.
- h) Two Inter-University Centres were set up as Registered Societies. An Inter-University Consortium has also been set up at Indore.

10. Education for Women's Equality

Conditions for assistance for women's colleges have been relaxed; A scheme for Post-Doctoral Fellowship for Women has been introduced.

Programme of Women's Studies has been introduced in 28 universities/colleges.

11. Education of Scheduled Caste and Scheduled Tribes

Several measures have been taken in this regard such as reservations in admissions, appointments, award of JRFs Research Associateships, Teacher Fellowships besides seats in hostes and award of scholarships etc.

Special Cells, have been set up in universities to ensure effective implementation of programmes for SC and ST. At present such cells are in 82 universities. Conditions for assistance for SC & ST colleges were relaxed.

12. Minorities Education

20 Universities and 22 colleges are participating in the programme.

13. Education for the Handicapped

The Commission has been assisting 8 Uniuversities/ Institutions in organising courses in special education for teaching handicapped students.

14. Adult Education

UGC has assisted universities and colleges to participate in Adult Education, Continuing Education and Population Education programmes. 95 universities and over 2500 colleges participated in the programme.

15. Examination Reforms

 Continuous internal evaluation by 52 universities, 18 institutions deemed to be universities and 23 Agricultural/ Technological Universities;

- Question banks by 18 Universities, 8 Institutions deemed to be universities and 5 Agricultural Universities;
- Grading system in 23 Universities, 12 Institutions deemed to be Universities and 22 Agricultural/Technological Universities;
- Semester system in 51 Universities, 13 Institutions deemed to be Universities and 19 Agricultural/Technolo-gical Universities;
- 89 Universities/Institutions syllabus into units/areas;
- 85 Universities/Institutions repeated questions set in the previous examinations;
- 84 Universities/Institutions choice for students be restricted to each unit of syllabus;
- 81 Universities examination, without fulfilling minimum number of lectures/tutorials/laboratory sessions; and
- 86 Universities/Institutions taking steps to ensure the smooth conduct of examinations.

16. Youth and Sports

The Commission assisted universities and colleges for development of sports infrastructure. 51 universities and several colleges were assisted during 7th Plan.

11 Universities and 22 Colleges were assisted to introduce 3 year degree course in Physical Education, Health Education and Sports.

VI: UGC 8TH PLAN PROGRAMMES (1990-1995) -SOME DIRECTIONS

The approach to the 8th plan in development of higher education will be broadly on the following lines:

- (a) to consolidate and strengthen the facilities in the universities and colleges;
- (b) to modernise and upgrade the content of courses and of laboratory work;
- (c) to strengthen the institutions and departments on a highly selective basis;
- (d) to develop and institutionalise professional development programmes for the teachers;
- (e) to extend support to research in a substantial way and to ensure high quality of research;
- (f) to strengthen and expand the cooperative facilities and inter- university centres; and
- (g) to modernise, strengthen and re-structure the management of the institutions.

The programmes designed to achieve the above mentioned objectives, have been briefly discussed in the following paragraphs:

CONSOLIDATION AND DEVELOPMENT OF UNIVERSITIES/ COLLEGES/ AUTONOMOUS COLLEGES.

- Development assistance to Central Universities including Delhi Colleges and Medical Colleges in Central Universities.
- (2) Development of State Universities including Institutions Deemed to be Universities and Postgraduate Centres. About 125 Universities including Deemed to be Universities are receiving grants from the Commission for their general development. Few more universities could be added to the list after they have been declared fit by the UGC for Central Assistance.

The Commission has agreed to provide separate allocations to selected universities for the construction of BHARAT BHAWANS hostel complexes. This scheme will be implemented in the 8th Plan.

(3) Development of Colleges

Over 3000 colleges are receiving assistance from the Commission. Over 2000 colleges yet remain to be enlisted under Section 2(f) of the UGC Act. More colleges will to be assisted. Assistance to selected colleges for special support under the College Science Improvement Programme and College Humanities and Social Science Improvement Programme will need to be continued in the 8th Plan.

(4) Autonomous Colleges

104 Autonomous Colleges exist as at present. An equal number is in the pipe line. Amendments of the Acts/approval of the Statutes in this regard are under the consideration of the appropriate authorities. The programme is to be implemented in a big way during the 8th Plan.

(5) College Development Council

Such Councils exist in about 85 universities. More such Councils will be established in the remaining universities and the programme of the existing College Development Councils will be strengthened and expanded during the 8th Plan.

6.2 COURSE CURRICULUM, FELLOWSHIPS AND FACULTY

Restructuring, redesigning of courses, curriculum development and introduction of courses in emerging area.

(1) Preparation of Model Curricula both for undergraduate and postgraduate courses -

27 curriculum development centres have already been set up for the purpose. Preparation of model curricula will be continued and model lists of needed infrastructure will be prepared in the 8th Plan.

(2) Restructuring of courses at the Undergraduate level

Courses are to be restructured along lines of the UGC guidelines. With the establishment of autonomous colleges/departments a large number of colleges/ university departments may avail the benefit of this scheme.

(3) Introduction of Courses in the emerging areas

Courses in emerging areas like Bio-technology, Oceanography, Marine Science, Electronics, Atmospheric Sciences, etc. have been introduced in selected universities/colleges in collaboration with the concerned departments of the Government of India. Introduction of such courses will be strengthened and expanded in the 8th Plan.

(4) Training of Teachers

New Education Policy emphasized orientation programmes of new entrants to the teaching profession as well as to organise refresher courses for the inservice teachers. Most of the academic staff colleges have already become functional. 150 university departments/ institutions for conducting special oriented refresher courses for inservice teachers have also been identified. The programme will be strengthened and expanded during the 8th Plan.

(5) Organisation of Seminars, Symposia, Summer institutes etc

Organisation of Seminars, Symposia, Summer Institutes, Workshops and participation in International Seminars/Symposia/Conferences by the universities and colleges will be continued in the 8th Plan.

(6) JRF Test

The Commission initiated the process of selecting junior research fellows in 1984 through a National Level Test. A joint UGC-CSIR test is held for selecting junior research fellows in Sciences. UGC holds examination in Humanities Social Sciences and Languages independently. These programmes will be strengthened and linked with qualifying test for teachers during 8th Plan period.

6.3 EXTENSION ACTIVITIES AND OTHER EDUCATIONAL PROGRAMMES

Programme for Weaker Sections of Society (SC/ST/ Physically Handicapped Students etc.)

The following schemes would be continued during 8th Plan period.

(a) Special cells for SC/STs in the Universities, remedial teaching, special preparatory training to appear in public service examinations etc.

(b) Coaching classes for competitive examinations for socially and weaker sections amongst minority communities.

(c) Assistance to selected universities/colleges offering courses to teachers for teaching handicapped children.

(2) Mass Communication

The following activities will be strengthend during the 8th Five Year Plan period:

- Two hours transmission time on higher education through INSAT- IB Satellite TV Programme.
- Educational Media Research Centres and Audio-Visual Research Centres.
- Provision of TV sets to more colleges.
- Implementation of model courses material in all subjects of undergraduate programmes.

(3) Physical Education

Schemes initiated by the Commission for physical education, sports and games will be further implemented in the universities and colleges.

(4) Adult, Continuing and Extension Education

Efforts have been made to integrate the various activities of the university sector by adopting area based approach through integration of adult education centres with Jana Shikshan Nilayams and non-formal education centres. Programmes of Adult Education, Population Education, etc. will be implemented intensively during the 8th Plan period.

6.4 PROGRAMMES FOR QUALITY IMPROVEMENT OF RESEARCH

(1) Special Assistance Programmes on Institutional basis

The Commission has been providing assistance to selected departments with a view to strengthen the research activities and to encourage the pursuit of excellence. Assistance to these departments as CAS/DSA/DRS will be continued in the 8th Plan.

(2) Supportive Service for Research

UGC has been assisting the universities in establishing Instrumentation Centres and Regional Instrumentation Centres. These schemes will be continued.

(3) Computer Education & Facilities

While computers have been provided to most of the universities and over 800 colleges. Computer facilities will be immproved in the universities and mini computers will be provided to more colleges.

(4) Individual Research Support

Schemes like major research projects, minor research projects, career awards, resarch scientists, research fellowships, research associateships etc. will be continued.

Schemes of Emeritus Fellowships, National lecturerships, Visiting Professorships, Visiting Fellows etc. will be reviewed and appropriate schemes thus formulated will be implemented during the 8th Plan.

(5) National/Research Facilities

Some Regional/National centres have already been set up. The strengthening and expansion of such centres as also opening of new centres will be an important activity during 8th Plan.

(6) COSiST Programme

The basic objective of the programme is to help the selected departments which have already achieved high quality performance. The programme will be strengthened and expanded during the 8th Five Year Plan period.

Sub-Plans have been formulated for effective implementation of following programmes:

- Computer facilities
- Research
- Countrywide class-room
- Inter-University Centres
- COSIST

6.5 OTHER IMPORTANT SCHEMES

(1) International Co-operation and Area Studies

(a)Cultural Exchange Programme: Such programmes are being implemented by the UGC with 70 countries. It is envisaged that the activity will continue during the 8th Year Plan.

(b)Area Study Programme under which selected universities undertake indepth studies relating to History, Economics, Cultural Geography and Languages etc. would be strengthened.

(2) Jubilee/Centenary Grants:

The Commission has been paying grants to universities for celebrating Silver/Golden/Diamond & Plantanium Jubilee etc. These activities will be continued in the 8th Plan. Funds will also be provided to colleges have completed 100 and 150 years.

(3) Accreditation & Assessment:

It is proposed to set up an accreditation and assessment council for self-evaluation and assessment of universities and colleges during 8th Plan.

The UGC has since discussed and considered, the 8th Plan normal Development Proposals of State Universities, Institutions known as ' deemed universities' in General education as also in Engineering and Technology.

VII: A NOTE FROM PROF. YASH PAL, CHAIRMAN, UGC ON EIGHTH PLAN DIRECTIONS

- 1. The University Grants Commission, having the focal responsibility, backed up with certain statutory powers for the coordination and maintenance of standards of higher education, has been consistently making efforts to evolve a set of acceptable ideas to improve the content and quality of education, to structure for better serving the individual and societal needs of our times, and to link higher education with national development. There has been phenomenal expansion of facilities for higher education during the last 4 decades. The system has matured to meet the requirements of highly skilled and middle level trained manpower in all areas of national activity. While some of our institutions are comparable to anywhere in the world, there exist pockets of imbalances and disparities of educational opportunities and facilities.
- 2. By the end of Seventh Plan, there were 147 universities, 27 institutions deemed to be universities under section 3 of the UGC Act and 6912 colleges with an estimated enrolment of 4.1 million students in the formal system and 0.65 million students in the non-formal/distance education/correspondence courses and continuing education. Women students, and those belonging to Scheduled Castes and Tribes constitute nearly 32% and 10% of the total enrolment in the system. By the turn of the century, the total enrolment is likely to be somewhere between 7-8 million mark, and reach 13 million mark by 2010.
- 3. Due to galloping inflation and rise in prices, public expenditure per student per annum has been declining, in real terms, more perceptibly in professional education, despite ever increasing allocation of funds for higher education during successive five year plans. There is an absolute urgency to make higher allocation for this sector, if the objectives formulated in the NPE have to be achieved.
- 4. Though, the strategies for the implementation of various programmes were finalised late in 1986-87, several things have already happened. Teachers have been given better salary scales and it is hoped that the university will be able to attract the best talent to the teaching profession. For the first time a Code of Ethics and procedure for assessment and evaluation of teachers have been evolved after extensive discussions with teachers' organisations. A system of Academic Staff Colleges for orientation and refrésher courses for teachers has started working. The first screening test for recruitment of lecturers into colleges and universities was conducted in December, 1989. States have been also addressed to participate in this regard by evolving their own mechanism if they so wish. Alternate models of University Management are being considered. The impact of all these steps will be seen only a few years from now.

- 5. The need for conferring autonomy to college was stressed by the Education Commission, under Professor D.S. Kothari, as far back as in 1966. The progress in this regard has not been encouraging and 104 colleges only have been granted autonomy so far. Besides some reluctance on the part of the teachers' organisations, many State Governments have not yet modified the Acts, Statutes, and Ordinances of the universities to enable them to grant autonomy to colleges and university departments. It is to be appreciated that many of the issues related to redesigning of courses, improvement of teaching methods, curriculum innovation and examination reforms, though in operation over the years, will not be addressed properly unless teachers and managements in colleges have the rights and responsibilities in this regard. Redesigning of courses of study assumes greater importance in the face of the declared policy on right to work and creating employment potential. During the coming Plan, we must make extensive efforts, nationally, to make a substantial move away from the archaic system of affiliated colleges. It does not exist in any developed country in the world.
- 6. The phrase "Maintenance of standards" has to be understood in a wider perspective. Standards are not to be defined only in terms of syllabi, number of teaching days and attendance, but also in terms of the quality of the atmosphere which encourages commitment to learning, a freedom to innovate, an impatience with pseudo learning and intolerance of utter mediocrity. This cannot be done only through regulatory means. In fact the important inputs have to be related to creation of conditions where initiative is transferred to where it belongs, to teachers and students and local bodies, with general norms being prescribed. Such norms are indicated by the University Grants Commission from time to time, and are evolved through discussions with academics all over the country.
- 7. Universities and colleges continue to be established on considerations other than academic planning, quality of education and availability of resources in terms of teachers and infrastructure. The existing powers of the UGC do not enable it to stop the setting up of a college or, for that matter, a university. It has been properly suggested that State Councils of Higher Eduation (SCHE) should be set up in order to coordinate the growth of higher education in various States in close collaboration with the UGC and keeping in mind the guidelines framed by the UGC. Though the process has started with the establishment of SCHE in Andhra Pradesh, it is going rather slowly and must be accelerated. The stress should shift to quality and relevance rather than starting of new institutions as status symbols.
- 8. In recent years, the Programmes of Special Assistance including COSIST and Condensed Matter Science (Superconductivity) have made a qualitative difference in the capabilities and output of the university system. The total inputs have been comparatively small as compared to the size of the university system but the results have demonstrated that the

system contains elements of capability which have been neglected for a long period of time. As the document of the Education Policy 1986 emphasises, a time has come to move the universities centre-stage. The total amount of research support given to universities and colleges in all for the last 40 years is a tiny fraction of the total amount spent by the country on scientific research in one single year. Indeed we seem to spend less on the whole of higher education, including rese- arch done in the universities, than we do on research and development in science & technology. While it is true that higher education is a part of the total education system and its development must bear some relation to the overall spending on education, we must recognise that inputs into higher education have to be decided in terms of an absolute comparision between what we spend and what other industrial nations of the world spend. The work done in our higher educational institutions should produce knowledge and human resource of quality and quantity as will allow us to run with the world in these times of fast change and intense competition. Therefore, the allocation for higher education has to be seen as an essential component of our overall economic plan and deserves an order of magnitude enhancement.

9. A beginning has been made to set up cooperative institutions within the higher education system. This includes a number of inter-University Centres/Consortium set up, sometimes, in cooperation with the national laboratories and departments concerned with R & D in science and technology, where teachers and students from the universities can work, and inter-act with each other and with facilities not normally available to any one university. One should proceed from this to set up national research centres within the university system. Exposure to relevant research while learning is the best way to ensure that learning would be exciting and the curricula will change naturally while, on the other hand, the world of knowledge, creation and research will gain through the application of bright young minds. It is through these measures that we can truely "Maintain Standards" and create a new universe for our colleges and universities. What has been barely initiated needs a further push.

The national laboratories and research institutes must get into a closer partnership with the university system. For this purpose and for improving inter-action between the universities themselves, an institution Associateship programme is being formulated and will be pursued in the coming years.

10. It has become quite fashionable to talk about the wrongs of our university system. Yes, there are serious lacunae in the system, but in the dust and din and general noise which surrounds the world of universities and colleges, we do not see the achievements, not some brilliant jewels. It is well known that a large fraction of the Fellows of National Academies come from the university system and a majority of prestigious national awards are also taken by

academics and scientists from the university system. There is no country in the world which is satisfied with its educational system, nor should be we with ours. It is interesting that practically the same language is used to describe the so called "decay" of the higher education system in most advanced countries as in India. Lot of turmoil in our colleges and universities reflects the turmoil in the society at large. Yes, it is desirable that arguments within the academic environment should exhibit a greater balance, objectivity and incisiveness than in streets and bazaars of our cities or rallies at the Boat Club. I think there should be a lot of purposeful soul searching and trying and we should learn to recognise this both from within the system and outside. The greatest enemy is cynicism and we must do everything possible to fight it, while being mindful of our inadequacies.

- 11. Some of the elements which have not received sufficient attention, largely because of the inordinate growth in colleges and universities are related to provision of student - services and amenities like sitting places for teachers. Some attention, however, has been paid to these in the responsible guarters.
- 12. Concern has also been expressed for the need to put special focus on quality of undergraduate education. It has been suggested that there should be at least a few colleges of excellence in each State. A specific provision for this has to be made. Another proposal not reflected in financial terms, is encouraging the starting of 5-year integrated courses in science in a number of universities so that the students at the undergraduate level have an opportunity to inter-act with the best of minds.
- 13. An aspect of the university system which has grown substantially during the last few years is related to extension programmes and linkages with society. The system is intimately involved in programmes related to the National Literacy Mission, Population Education, etc. Several thousand adult education centres are being operated. It is through such activities that atleast some students develop a deeper appreciation of the social reality of the country, while contributing something valuable at the grass root level.
- 14. The goal of all programmes of education is the marriage of thought and action. This, the university is required to achieve through the triology of teaching, research and extension. The findings of research in science and technology will be made available through teaching and extension and for social and rural transformation. Rural transformation needs new professionals who abondon disciplinary boundaries and those who span the two cultures of academia and practice, taking the best from each, criticism from the one and the vision and action from the other. And hence the need for multi-disciplinary and inter- disciplinary approach in the higher education programmes, as the universities will be required to mould themselves to the needs for meeting the "revolution of rising expectations", of an evolving society.

- 15. The Country-wide Classroom programme of the UGC has proved to be very successful. It addresses not only the undergraduate students, but also professionals from various disclplines and educated public all over the country. It can be seen both as an educational improvement programme for students as also mass continuing education for academics and professionals spread all over the country. Since the telecast material is produced through cooperative efforts of the university system, it is also in the nature of action-learning. It is truely a unique extension programme and needs to be supported fully.
- 16. At the initiative of the University Grants Commission, but with full cooperation of a number of agencies, a proposal has been worked out to set-up a National Information and Library Network (INFLIBNET), interconnecting all major libraries in the country, in universities and research institutions. Such a Network would also provide opportunities for working together to large number of academics, to the advantage of everyone concerned. This is one example which shows clearly that in areas of higher education and research isolation of institutions under different agencies is counter-productive and will harm all the institutions. This proposal seeks to address the extremely difficult problem of adequate provision of books and journals to the higher education and research system. The project has been worked out in great detail and must be started as soon as possible. The Open Universities and distance education system are also destined to play a vital role in the overall educational system.
- 17. The observations and recommendations made in the reports of the following Committees/Conferences on the 8th Plan direction have been kept in view in formulating the Eighth Plan Development Proposals of Higher Education:
- (i) Mid-term appraisal of Seventh Plan Development Programmes of Universities etc. by UGC Expert Committees which visited (June 1988- March, 1990) all the State Universities and Deemed Universities which were assisted by the UGC;
- (ii) Various National Seminars/Committees Including the Estimates Committee of the Parliament (1988-89);
- (iii) Working Group on Higher Education for Eighth Plan (1990-95); and
- (iv) Conference of Vice-Chancellors of Universities etc. (October, 1989).

Proposals pertaining to development of Youth, Physical Education and Sports, and Engineering and Technology (including Management), are being considered separately.

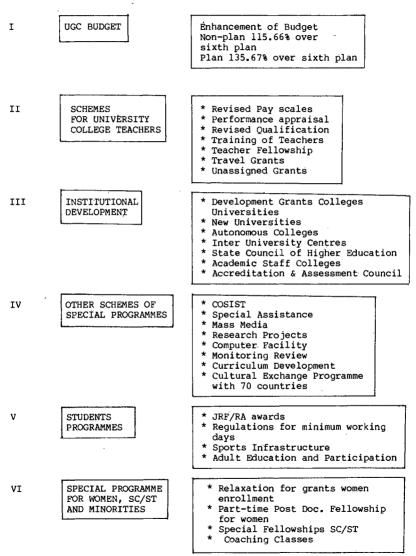
- 18. The approach of the UGC to development of higher education in the Eighth Five Year Plan will be on the following lines:
 - to give importance to consolidation and strengthening of the facilities in the universities and colleges;
 - ii. to modernise and update the content of the courses and the laboratory instruction and link them to meet the needs of economic development of the country;
 - iii. to promote the preparation of instructional material;
 - iv. to continue active support to the establishment of autonomous colleges and continue support to examination reform;
 - v. to develop and institutionalise the professional development programmes for teachers in and outside the Academic Staff Colleges;
 - vi. to extend significant support to research and to ensure high quality in research;
 - vii. to promote in a substantial way sharing of facilities available in institutions and pursue the strategy of establishing inter-university centres;
- viii. to modernise and restructure the management of the university system; and
- ix. to initiate and support programmes for the promotion of social justice and equity in accordance with the declared policies and implement them effectively.
- 19. in the end I would reiterate, while forwarding these proposals, that in the hustle and bustle of Plan formulation and in trying to make ends meet, we should not forget the very pivotal role, the higher education has come to play in a world where creation of new goods and services, ideas and plans, economic policles and management structures are essential to our well-being and survival. Higher Education ever would remain the fountain-head of all subsequent education as also the source which feeds cadres to the professions, to bureaucracy, to technical expertise and so on. It need not be over emphasised that money spent on higher education is never at the expense of the primary and secondary education. To the extent that in most developed countries a much larger proportion of the eligible age group are involved in higher education, and on an average, 6% to 10% of the National Income is spent on education, India remains backward in this area. Our higher education system should have the same or similar working atmosphere and facilities which rest of the developed world have. Yes, I talk of the developed world because there would be the competitors and

any country which cannot compete atleast in some of the areas will be doomed to a state of permanent cultural and economic dependence. We should spend a lot of our resources on research and development but unless we simultaneously enhance the quality of our higher education system including its research and development capabilities, we will not get very far.

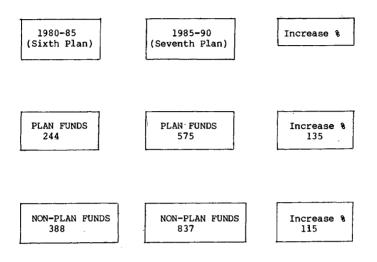
ANNEXURES

Annexure-I

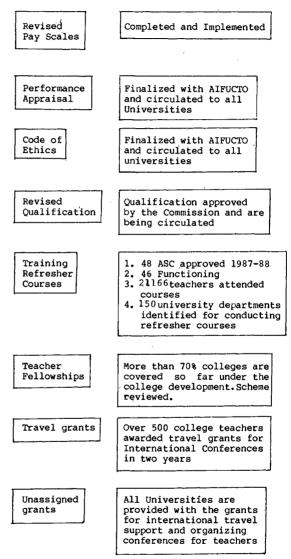
BRIEF OVERVIEW OF UGC ACTIVITIES



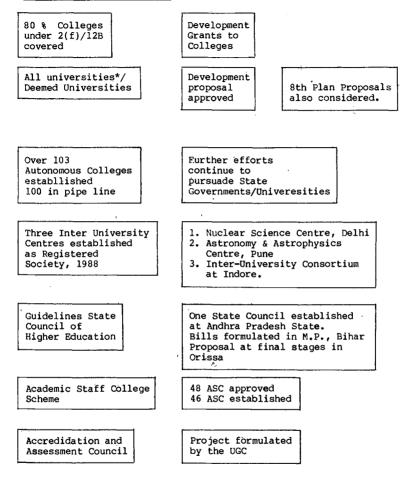
UGC BUDGET POSITION (Rs. in Crores)

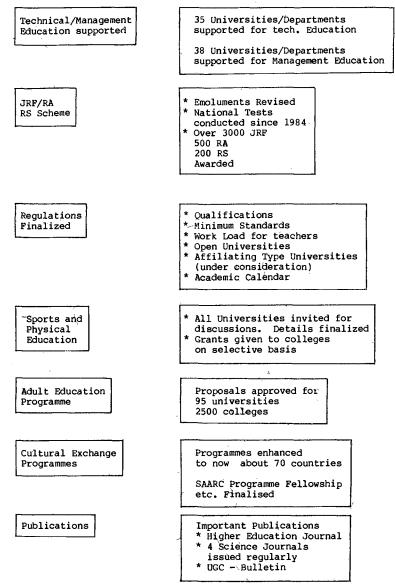


2. UNIVERSITY/COLLEGE FACULTY

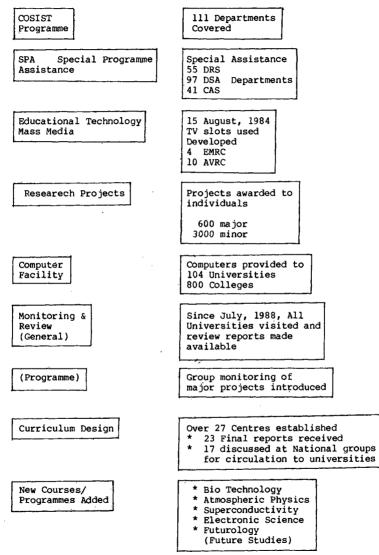


3. INSTITUTIONAL DEVELOPMENTS





4. OTHER SCHEMES AND PROJECTS



Annexure-II

SOME INFORMATION ON HIGHER EDUCATION

10.	Number of Doctorate Degrees awarded (1987-88)	7300
		Agr. (557); Engg./Tech. (236); 5); Medicine (93); Vet. Science
11.	Teachers - Universities : (Tot	tal 55000)
	P R (11.7%) (24.49%) (59	L T/D 9.60%) (4.20)
	Colleges:	
	Sr. Lecturers Lectur (13) (82)	
12.	Special Assistance Programme:	
-	D.S.A. 169 (1	Hum. & Soc.Sc. 15; Sc. 26) Hum. & Soc.Sc. 73; Sc. 96) (Hum. & Soc.Sc. 14; Sc. 58)
13.	Number of curriculum development centres;	27 (10 in Sc. & 17 in Hum. & Soc. Sc.)
14.	Autonomous Colleges;	104 9 Universities 208 Colleges 5 Sub. National Difference Line Plannis and Attinistration 208 Colleges
15.	Restructuring of courses:	9 Universities 17 Band Attinieration
16.	Academic Staff Colleges	46
17.	COSIST	111 Departments
18.	COHSSIP COSIP	595 (I-Phase), 99 (II-Phase) 303 (I k II Phase)
19.	Computers provided	104 Universities, 800 colleges
20.	T.V. sets provided	2000 Colleges