HIGHER EDUCATION DEPARTMENT

POLICY NOTE
2013 – 2014

DEMAND NO. 20

P. PALANIAPPAN
MINISTER OF HIGHER EDUCATION

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POLICY NOTE

DEMAND NO.20 - HIGHER EDUCATION

2013–2014

INTRODUCTION

> *"Without a body of sufficiently skilled and balanced workforce, no economy can hope to develop to its potential. Vision 2023, under its Education and Skills mission, aims to establish a robust human resources pipeline."*
>
> **Hon'ble Chief Minister of Tamil Nadu**
> **Vision Tamil Nadu 2023**

1.1 Tamil Nadu is a frontline State in several fields viz., Education, Health, Industries, Social Welfare etc., thanks to the dynamic guidance of our **Hon'ble Chief Minister**. The Higher Education sector in Tamil Nadu is moving at an accelerated pace to meet the demands of the century, in terms of research and

development. In keeping with the vision of our **Hon'ble Chief Minister** to make Tamil Nadu, "the innovation hub and the knowledge capital of India" and "to set Tamil Nadu in a high growth trajectory" Higher Education Department is all set to ensure access, equity and world class standards for our youth.

In accordance with the vision of the **Hon'ble Chief Minister**, the Department of Higher Education has taken significant steps to increase the enrollment of students by establishing several Arts and Science Colleges, Polytechnics and Engineering Colleges.

The leadership of the **Hon'ble Chief Minister** has given a new thrust and direction to the Higher Education sector, in formulating the Vision and Mission of the Department.

VISION

- To make Institutions of Higher Education emerge as Centres of Innovation, Excellence and Development.

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- To provide world class quality education especially to students from rural and backward areas and marginalized families and to develop, recognize and enhance talent and skills in youth.

- To equip and enable youth to meet the emerging challenges and demands of the century with due emphasis on inclusion in higher education.

MISSION

- "To promote Human Resource Development through self-actualized Institutions, producing high quality ethical professionals in sufficient number to make this State and Country prosperous, and to make Tamil Nadu a global hub for University Education."

1.2 **OBJECTIVES**

- To enhance the quality of Higher Education to world class standards, in Arts and Science Colleges, Polytechnics and Engineering

Colleges, through special initiatives and schemes.

- To make available knowledgeable and skilled manpower through industry institution linkage for research, for inculcating entrepreneurship culture and gainful employment.

- To popularize the application of Science and Technology among common people.

1.3 **SPECIAL INITIATIVES TOWARDS EXCELLENCE**

- "Networking of Universities" (META UNIVERSITY) and "Clustering of Colleges" for academic and research activities in emerging areas of knowledge.

- Ensuring state-of-art infrastructure in higher education institutions and equipping the classrooms, laboratories with the latest trends in technology applications for teaching and learning and to revitalize

Universities and Higher Education Institutions.

- Providing international exposure and experience to students and teachers through special schemes.

- Organizing exclusive training programmes for upscaling the quality of teaching in Higher Education Institutions.

- Promoting Policy reforms in administration to complement the academic activities, initiated.

- Achieving faster, sustainable and inclusive growth through social inclusion; transforming education to become alive to public needs; ensuring "quality inclusive education" with potential for self-development, for the Differently Abled.

SCHEMES

1.4 The Twelfth Five Year Plan aims at multiple interventions articulating the need for expanding educational

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facilities and improving quality of education. In line with Vision 2023 of our **Hon'ble Chief Minister**, the following schemes are being implemented in the Higher Education sector:-

i. Smart Classrooms with Video-Conferencing facilities have been established in 10 universities at a cost of Rs.2 crore. This has improved class-room teaching with hi-tech support.

ii. Foreign language laboratories have been established in 10 Universities at a cost of Rs.1.5 crore for enhancing language skills of students in English, Chinese, Japanese, German etc., enabling them to compete in the world market.

iii. Entrepreneurship cum Skill Development Centres have been established at a cost of Rs.2 crore in 10 Universities, to develop the entrepreneurial skills in students for establishing enterprises, to trigger creativity in them and to help in securing decent employment

commensurate with the needs of the job-market.

iv. The scheme of inviting foreign professors of repute has been introduced in 10 Universities at a cost of Rs.1 crore. The students and teachers of our institutions are exposed to international strategies of teaching and learning as well as gaining from the sharing of expertise.

v. Curriculum Development Cells have been established in 10 Universities at a cost of Rs.10 crore, to restructure curricula to be on par with global standards to build a workforce underpinning demands of the industry and other business organizations.

vi. In an epoch making move, the **Hon'ble Chief Minister** has ordered the opening of 11 Arts and Science Colleges during 2011-12 in Srirangam, Harur, Pappireddipatti, Sattur, Thiruthuraipoondi, Vedaranyam, Nannilam, Thiruppathur, Kallakurichi, Nagalapuram and Nemmeli and

11 Arts and Science Colleges during 2012-13 in Edapadi, Kanniyakumari, Vedasandur, Modakurichi, Thirumangalam, Thiruvottiyur, Paramakudi, Kadayanallur, Aruppukottai, Nagapattinam, and Arakkonam.

vii. Likewise, in the arena of technical education, 10 Polytechnic Colleges, at Srirangam, Gandarvakottai, Sankarapuram, Perunthurai, Ariyalur, Uthangarai, Jolarpet, Usilampatti, Andipatti, and Chekanoorani and 2 Engineering Colleges at Sengipatti, Thanjavur District and Chettikkarai, Dharmapuri District are to be opened. One Engineering College at Bodinayakanur has already been opened during 2012-13 and is functioning with 267 students.

viii. University Business Collaboration Centres have been established in 6 Universities viz., University of Madras, Manonmaniam Sundaranar University, Bharathiar University, Bharathidasan University, Madurai Kamaraj University and Alagappa University which would act as

agencies for co-ordinating Universities, leading Industries and other business organizations in Tamil Nadu, India and abroad. Tamil Nadu State Council for Higher Education is to act as a Nodal Centre.

ix. Study Abroad Programme for Faculty and Students has commenced with the signing of a Memorandum of Understanding by The Tamil Nadu State Council for Higher Education with British Council in the presence of **Hon'ble Chief Minister**. This has come as a boon to the students and faculty especially from economically, under privileged classes in rural areas and has received wide acclamation from administrators, educationists, students, teaching community and general public. 25 students and five faculty members have been selected to study one semester in the Universities in United Kingdom from September 2013 to January 2014.

x. Centres for Technical and Academic Writing have been established in 9 Universities viz., University of Madras, Manonmaniam Sundaranar University, Bharathiar University, Mother Teresa Women's University, Bharathidasan University, Madurai Kamaraj University, Periyar University, Alagappa University and Thiruvalluvar University. These Centres would develop the skills of students in writing academic reports and drafting other forms of written communication.

xi. Incubation and Technology Transfer Centres have been established in 9 Universities viz., University of Madras, Manonmaniam Sundaranar University, Bharathiar University, Mother Teresa Women's University, Bharathidasan University, Madurai Kamaraj University, Periyar University, Alagappa University and Thiruvalluvar University. The focus of these centres would be "incubation activities" transfer of innovative technology for practical purposes among communities and

converting creative ideas into commercially viable products.

xii. Centre for Multimodal Material Production for the Differently-Abled have been established in 10 Universities viz., University of Madras, Manonmaniam Sundaranar University, Bharathiar University, Mother Teresa Women's University, Bharathidasan University, Madurai Kamaraj University, Periyar University, Alagappa University, Thiruvalluvar University and Tamil Nadu Open University. These Centres will produce Braille books with or without tactile graphics in various topics or subjects in English as well as in Tamil languages, as required by the students. These Centres will be equipped with heavy duty Braille Printer (Embosser) for high speed production and with Personal Computers for creating a data bank to feed the equipment. Multimedia based computer assisted package will be developed to help students with learning disabilities.

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xiii. Post Graduate Centres of Excellence in 10 Universities viz., University of Madras, Manonmaniam Sundaranar University, Bharathiar University, Mother Teresa Women's University, Bharathidasan University, Madurai Kamaraj University, Periyar University, Alagappa University, Anna University and Thiruvalluvar University have been established with High Tech Laboratories.

xiv. Anna University and Science City will network all libraries in Engineering Colleges and Universities which will enable students to access books, journals and reference materials through internet. This will be an advanced technology for making knowledge and information easily accessible.

xv. Special care will be provided for slow learners / below average students, especially the first generation learners in Government Arts and Science Colleges to prevent dropouts and to enable them to be on par with others, academically.

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xvi.   Soft Skill Centres have been established in 30 Colleges under 5 Universities viz. University of Madras, Bharathiar University, Bharathidasan University, Madurai Kamaraj University and Thiruvalluvar University. These centres would provide training programmes to teach life skills to students and to develop their personality traits.

xvii.   Tamil Nadu Open University will establish Community Colleges in all 32 districts. In the first phase, 5 Community Colleges have been established at Chennai, Coimbatore, Dharmapuri, Madurai and Tiruchirappalli during the year 2012-13. These Community Colleges will provide Vocational Education programmes and Employment opportunities for the local communities.

xviii.   Zonal Centres of Tamil Nadu Open University have been established at Srirangam and Coimbatore to facilitate students to access

information and learning materials, close to their place of residence.

xix. Orders have been issued for the opening of PG Extension Centres in Perambalur, Erode, Kanniyakumari, Dharmapuri and Virudhunagar Districts through Universities concerned. These Centres will offer PG Courses and help students to pursue research with advanced technology. Rural students will be greatly benefitted by this scheme and these students will achieve the desired levels of competence like their counterparts in urban areas. These Centres with High Tech Laboratories ensure access to Post Graduate Courses and quality research to the rural and economically weaker students.

xx. During the year 2012-13, 299 new courses have been introduced in 51 Government Arts and Science Colleges and 841 posts of Assistant Professor have been sanctioned for a period of three years from 2012-13 to 2014-15. About 5500 students have benefitted.

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xxi.   The process of distribution of priceless Laptop Computers to the students studying in Government, Government Aided Arts and Science Colleges / Polytechnics / Engineering Colleges is in progress. 3,35,086 priceless laptop computers were distributed to the students. This scheme is being implemented to ensure that the youth will enjoy the benefits of the best standards in education and make the State progressive to transform the exalted vision of the **Hon'ble Chief Minister,** into reality.

xxii.   The ICT Academy of Tamil Nadu has trained 1352 teachers in Higher Education who in turn prepare their students to become "industry-ready" and employable.

xxiii. Legislation for merging the Anna Universities of Technology with Anna University, Chennai has been enacted and has come into force with effect from 1.8.2012. All the engineering colleges in the State have now come under one umbrella

for co-ordinated and integrated development of technical education.

In keeping with the growth of "Knowledge economy", we have adopted strategies to make higher education inclusive and meet the aspirations of young men, women and the public. The policy reforms of Government of Tamil Nadu in higher education is well within the emerging architecture of global trends in the field and the national agenda of access, equity and quality. The shift is from mere expansion to enrichment of quality ensuring excellence in higher education, while making provision for academic inputs from foreign education providers.

A holistic approach to target, under represented sections of society, while at the same time consolidating and improving quality aspects, is at the root of all the schemes. With these new schemes and focused action in key areas, a vibrant higher education system is in place in Tamil Nadu. All programmes of the Department of Higher Education have been formulated towards the realization of the goals and objectives of the "Vision

Tamil Nadu 2023" document which will "impact the lives of the common citizens in the most direct manner possible – substantial increases in income through generation of fruitful employment; improvement in the quality of life through provision of high quality infrastructure and services; focused growth of sectors where the State has a competitive advantage and above all peace, prosperity and protection of the vulnerable."

Financial Outlay: 2013-14

Under Demand No.20 Higher Education, the total outlay is Rs.3224.10 crore, of which Rs.1100.60 crore are for plan schemes and Rs.2123.50 crore are for non-plan schemes for 2013-14.

BUDGET ESTIMATE FOR 2013-14

Head of Account		Plan	Non-Plan	Total
		(Rs. In lakhs)		
2059	Public Works Maintenance and Repairs	-	2596.49	2596.49
2202	General Education University and Higher Education	10709.62	168978.52	179688.14
2203	Technical Education	79392.69	33780.03	113172.72
2204	Sports and Youth Services	1296.84	-	1296.84
2205 104	Arts and Culture Archives	10.00	690.08	700.08

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2235	Social security and Welfare	-	60.16	60.16
2251	Secretariat– Social Services	-	369.12	369.12
3425	Other Scientific Research	637.32	-	637.32
3454	Census Surveys and statistics Gazetteer and Statistical Memoirs	-	54.70	54.70
4202	Capital outlay on Education, Sports, Arts and Culture	18013.71	5820.97	23834.68
7610	Loans to Government servants etc.	-	0.01	0.01
	Total	110060.18	212350.08	322410.26

PART II SCHEMES FOR THE YEAR 2013-14

(Rs.In lakhs)

Sl. No	Name of the scheme	Ultimate Cost	Cost in 2013 – 14
I - Secretariat			
1.	Computerisation of Department	34.75	34.75
II - Directorate of Collegiate Education			
Component – I			
2	Construction of 7 Additional classrooms in Government Arts College, Chidambaram	70.00	70.00
3	Construction of Victoria Hostel for Men in Government Arts College (Autonomous), Kumbakonam	100.00	100.00
	Total	170.00	170.00
III - Directorate of Technical Education			
Component – I			
4.	Construction of 16 Laboratories in 4 Government Engineering Colleges	120.00	120.00

5	Establishing smart Classrooms in 5 Government Polytechnic Colleges	**50.00**	**50.00**
6	Establishing Campus wide Networking in 8 Government Polytechnic Colleges	**128.00**	**128.00**
	Total	**298.00**	**298.00**
IV - Tamil Nadu Archives and Historical Research			
7	Purchase of Storage Cabinets for Microfilm Unit.	**10.00**	**10.00**
	Total	**10.00**	**10.00**
V - Tamil Nadu Science and Technology Centre			
Component – II			
8	Establishment of District Science Centre in Thoothukudi District	**50.00**	**50.00**
9	Modernization of 3D Theatre in Periyar Science and Technology Centre, Chennai.	**23.00**	**23.00**
	Total	**73.00**	**73.00**

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VI - Science City			
Component – I			
10	Installing 10 KW Photovoltaic Solar Panel.	**15.00**	**15.00**
Component – II			
11	Production of Electricity / Power from Alternate Sources **(Wind Energy)**	**10.00**	**10.00**
12	Production of Electricity / Power from Alternate Sources – **(Hydro Power)**	**15.00**	**15.00**
	Total	**40.00**	**40.00**
	Grand Total	**625.75**	**625.75**

2. COLLEGIATE EDUCATION

2.1 Arts and Science Colleges have an important role to play in the higher education sector, since a large number of students pursue science and humanities as courses of their choice.

2.2 The Directorate of Collegiate Education was formed in the year 1965. To exclusively administer the Collegiate Education Department, the erstwhile Directorate of Public Instructions was bifurcated into Directorate of School Education and Directorate of Collegiate Education.

2.3 At present, 62 Government Arts and Science Colleges, 7 Government Colleges of Education, 162 Government Aided Colleges (viz., 133 Arts and Science Colleges, 3 Physical Education, 10 Oriental Colleges, 2 Schools of Social Work and 14 Colleges of Education) and 446 Self-Financing Colleges (viz. 438 Arts and Science Colleges and 8 Physical Education) and 651 Self Financing Colleges of Education are functioning under the administrative control of the Directorate of Collegiate Education. There

are 1,55,898 students in Government Colleges, 3,55,953 students in Government Aided Colleges, 3,72,664 students in Self Financing Colleges. There are 20,006 students in 35 University Constituent Arts and Science Colleges.

NEW COURSES IN GOVERNMENT COLLEGES

2.4 Taking into consideration, the increase in enrolment ratio in Government Colleges, 400 new Courses were introduced in Government Arts and Science Colleges during the academic years 2011-12 and 2012-13. A total of 986 posts of Assistant Professors were sanctioned for all the 3 years to teach the above new Courses. Sanctioning of posts along with the courses have been welcomed by educationists, teachers and students.

FREE EDUCATION

2.5 In the interest and welfare of students, who come from the weaker sections of the society and to encourage more number of students to continue

higher education, all Government Arts and Science Colleges provide Free Education upto PG level. 1,54,003 students were benefitted during 2012-13. All Government Aided Arts and Science Colleges provide Free Education upto UG level. 2,97,875 students were benefitted during 2012-13.

Free Education is provided upto PG level in Government Colleges of Education to the students belonging to SC/ST and Differently-Abled categories. Similar concession is given in Government Aided Colleges of Education upto UG level to the above categories.

FREE BUS PASS

2.6 Under this scheme, 1,99,923 students benefitted during the year 2012-13.

EMPOWERMENT OF WOMEN

2.7 Free coaching is offered exclusively for women students appearing for All India Civil Services and other Central Services Examination at Queen Mary's College, Chennai and Arulmigu

Meenakshi Government College for Women, Madurai. During 2012-13, 57 women students have joined the course.

ADD-ON JOB ORIENTED COURSES

2.8 Add-on course Scheme of University Grants Commission conducted in the Colleges of Arts and Science facilitates the students to obtain Certificate / Diploma in job oriented courses, issued by the Colleges concerned. The students of Government Arts and Science Colleges are also provided opportunity to undergo additional job oriented, technical short term Certificate Courses in Polytechnic Colleges after college hours.

ENGLISH LANGUAGE FELLOW PROGRAMME

2.9 Under the English Language Fellow Programme, one language expert sponsored by the American Embassy has trained 20 selected teachers from Government Colleges as Master Trainers. Along with the Language expert, the Master Trainers have conducted 12 Zonal Workshops and 297 teachers have been

trained. Four Government Autonomous Colleges in Chennai have sponsored these programmes by providing an amount of Rs.6,60,000/-.

PROJECT GENESIS TRAINING PROGRAMME

2.10 Through Project Genesis Training Programme sponsored by Infosys BPO Ltd., 204 Assistant Professors of Government Arts and Science Colleges have been trained. The trained Assistant Professors have organized 11 placement camps in 5 Centres. 196 students have been given employment through campus interviews organized at these Centres.

JOB FAIR

2.11 Job Fair has been conducted in the Government / Aided Colleges in the five regions of the Directorate of Collegiate Education. Such fairs brought many leading companies to recruit students. 1521 students of 36 Government Colleges and 10,687 students of 80 Government Aided Colleges have been selected.

STIPEND FOR TAMIL MEDIUM STUDENTS

2.12 In the scheme of granting stipend to Tamil Medium students in Government Colleges, 33,164 students have benefitted with a Government grant of Rs.1.35 crore during 2012-13.

SPECIAL COACHING TO SC/ST AND MBC STUDENTS

2.13 Special coaching is provided to students studying in Government Colleges belonging to SC/ST and MBC communities who face certain initial difficulties in subjects like English, Maths and Science. The special coaching classes are held after class hours and during weekends to help students gain confidence. A sum of Rs.2.00 lakhs has been sanctioned for implementing this scheme. 10,867 students have benefitted during 2012-13.

STIPEND TO RESEARCH SCHOLARS (Ph.D)

2.14 Students undergoing research in various subjects in Government and Government aided Colleges receive stipend at the rate of Rs.36,000/- per annum. 130 Research scholars benefitted. An expenditure of Rs. 46.80 lakhs has been incurred.

TRANSFER COUNSELLING

2.15 Transfers of teaching and non-teaching staff of Government Colleges under the control of the Directorate of Collegiate Education through transparent counselling method is in vogue. In the Transfer Counselling for the year 2012-13, 335 Teaching staff and 41 Non-Teaching staff have benefitted.

DEVELOPMENT OF INFRASTRUCTURE FACILITIES

2.16 The Government have accorded Administrative Sanction of Rs.100 crore for providing infrastructure facilities and basic amenities viz., tables and chairs for students and teachers,

Fixing modern black boards and notice boards in classrooms, Computer table and chairs for Language Labs, Table and chair for Departmental Libraries in Colleges, Cup-boards for books, Purchase of books for Libraries, computerization of Libraries, New lab and lab instruments, Tables, Work Tables, Water taps, gas tubes and overhead projectors for Science Departments, Hygienic water to the students and teachers, Improving kitchen hall and dining hall in students' hostels, toilet facility, dustbins, Lights, fans and accessories in class rooms, library, teachers' rest room and dining hall, to 62 Government Arts and Science Colleges, 7 Colleges of Education and 24 University constituent colleges totalling 93 Colleges. Speedy action is being taken to provide the above infrastructure facilities to the colleges.

NATIONAL SERVICE SCHEME (N.S.S.)

2.17 National Service Scheme has been implemented in Tamil Nadu since its inception in September, 1969. At present, National Service Scheme is functioning successfully with 3,70,018

student volunteers, in Universities, Colleges and Technical Institutions.

2.18 NSS activities are aimed at training of student volunteers in Leadership, Yoga and Meditation, Career Guidance and Counselling, Soft Skills Development, Disaster Management, First-Aid Training, Environment Enrichment Programme, Road Safety and Safe Driving, Helping the School Dropouts to continue their education, Blood donation, Blood grouping and maintaining Blood Donor's Directory. A number of health camps including leprosy, eye, dental, breast cancer eradication, cardiac care, mother-child care, AIDS awareness and general medical camps are conducted regularly. Special Programmes are organized to imbibe civic sense and to create awareness about Road safety measures.

2.19 In order to protect the ozone layer and to have an eco-friendly atmosphere, saplings are planted. Eradication of the use of plastic and polythene, formation of eco clubs are some of the other programmes. During Special Camping programmes, students

work with local youth in the adopted villages and help in creating permanent assets such as public utility services, construction of toilets, water storages, community halls, compound walls, developing play grounds, and road formation works.

2.20 The following achievements of the NSS student volunteers prove their social consciousness:-

- The volunteers donated 1,00,505 units of blood

- The volunteers planted around 6,98,000 saplings.

- 95,000 illiterates have been made literate through the sincere efforts taken by N.S.S. volunteers.

SPORTS

2.21 The students of Arts and Science Colleges have excelled in sports which is an integral part of education. The students have won medals and prizes at the State and National levels in Cricket, Kabaddi, Kho Kho, Football, Ball Badminton, Handball, Weightlifting and Athletics.

3. TECHNICAL EDUCATION

3.1 Established on 14th October 1957, the Directorate of Technical Education has been taking consistent efforts to formulate new policies and promote co-ordinated development in the field of Technical Education both at the Degree and Diploma levels. At present, there are 7 Government Engineering Colleges, 3 Government-Aided Engineering Colleges, 18 Constituent Colleges of Anna University and 525 Self-Financing Engineering Colleges. There are totally 553 Engineering Colleges and 69 stand-alone Institutions offering MBA and MCA Programmes.

3.2 There are 30 Government Polytechnic Colleges, 34 Government-Aided Polytechnic Colleges, 5 Affiliated and 395 Self-Financing Polytechnic Colleges functioning in Tamil Nadu. There are totally 464 Polytechnic Colleges and Diploma level Institutions.

ESTABLISHMENT OF INDIAN INSTITUTE OF INFORMATION TECHNOLOGY

3.3 The Government of Tamil Nadu is to establish an Indian Institute of Information Technology from the academic year 2013-14 in Srirangam Taluk, Tiruchirappalli District. The main objective of the Institute is to cater to skilled human resource requirement in the field of Information Technology and related areas. The Institute will function under Public Private Partnership (PPP) mode along with Government of India and the State Government as partners. The total capital cost of the project is Rs.128.00 crore in the ratio of 50:35:15 (Rs.64.00 crore – Government of India, Rs.44.80 crore - State Government, Rs.19.20 crore – Industry). Land to an extent of 56.37 acres has been identified in Sethurapatti Village, Srirangam Taluk and it will start functioning temporarily in Bharathidasan Institute of Technology Campus in Trichirappalli District from 2013-14. This institute will be a prestigious venture and will be established on world class standards.

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ESTABLISHMENT OF TWO GOVERNMENT ENGINEERING COLLEGES

      3.4 The Government Engineering College at Bodinayakkanur, Theni District has been functioning from the year 2012-13. As per the announcement made by the **Hon'ble Chief Minister**, two Government Engineering Colleges will be established at a cost of Rs. 89.90 crore each at Chettikarai (Dharmapuri District) and Sengipatti (Thanjavur District). Lands for construction of buildings have been identified and financial sanction has been accorded for Rs.14.10 crore for construction of buildings for each Engineering College.

ESTABLISHMENT OF TEN GOVERNMENT POLYTECHNIC COLLEGES

      3.5 To offer skills necessary for meeting the competition in the global workplace, the need for Technical Institutions has increased. Realizing this, the Government of Tamil Nadu have passed orders to establish 10 Government Polytechnic Colleges at

Srirangam (Tiruchirappalli District), Gandharvakottai (Pudukottai District), Sankarapuram (Villupuram District), Perunthurai (Erode District), Ariyalur (Ariyalur District), Uthangarai (Krishnagiri District), Jolarpet (Vellore District), Andipatti (Theni District), Usilampatti (Madurai District) and Checkanoorani (Madurai District). Lands for construction of buildings have been identified and administrative sanction has been accorded for Rs.13.30 crore for construction of buildings for each Polytechnic college.

ESTABLISHMENT OF SELF FINANCING ENGINEERING AND POLYTECHNIC COLLEGES

3.6   During the year 2012-13, 27 Self Financing Engineering Colleges and 15 Self Financing Polytechnic Colleges were established in Tamil Nadu.

FREE TEXT BOOKS

3.7   To help students coming from the weaker sections of the society and pursuing Technical Education, free text books have been distributed. Free text

books in Communication English I and II, Engineering Maths I to IV, Engineering Physics I and II and Engineering Chemistry I and II are distributed to First year Diploma students in Government Polytechnic Colleges. During 2012-13, 12,065 students benefitted under this scheme and a sum of Rs.14,25,000 has been spent.

INTRODUCTION OF SHIFT SYSTEM IN GOVERNMENT POLYTECHNIC COLLEGES

3.8 The shift system introduced in 14 Government Polytechnic Colleges helps meritorious, economically weaker students hailing from rural areas to get Diplomas in Technical Education, thus paving the way for gainful employment. 3037 students have benefitted during 2012-13.

ENGINEERING SEATS THROUGH SINGLE WINDOW COUNSELLING

3.9 To enable the economically weaker and meritorious students to join engineering professional courses at an affordable cost, 65% of the under-

graduate Engineering seats in Self Financing Non-Minority institutions and 50% of the under-graduate seats in Self Financing Minority Institutions are being allotted through Single Window Counselling System of Anna University, Chennai. 1,27,404 students were allotted seats for the academic year 2012-13.

FIRST GENERATION GRADUATE CONCESSION

3.10 The intention of Government of Tamil Nadu to take Technical Education to the door steps of students from marginalised families is reflected in the tuition fee exemption scheme for the first generation graduate students admitted in Engineering Colleges under Government quota, through single window counselling. Total number of 2,48,064 students have benefitted during 2012-13 and Rs.478.7 crore has been disbursed. The scheme has been extended to Srilankan refugee students living in the camps of Tamil Nadu, who have been selected, for admission to Engineering Colleges under

Government quota through Single Window Counselling.

WAIVER OF TUITION FEES AND ISSUE OF FREE BUS PASS TO THE POLYTECHNIC COLLEGE STUDENTS

3.11 The schemes of waiver of tuition fees and issue of Free Bus Pass are continued for the students of Government Polytechnic Colleges, this year also.

TRAINING PROGRAMMES FOR POLYTECHNIC TEACHERS

3.12 The process of continuous improvement of teaching skills can alone ensure exposing the students to the latest trends in the field of Science and Technology and enable them to meet the emerging challenges and become true professionals. Training programmes are organized for the Polytechnic Teachers by the National Institute of Technical Teachers' Training and Research (NITTTR), Chennai to help the faculty to update their skills for the betterment of the teaching-learning process. 1430

Polytechnic Teachers have been trained during the academic year 2012-13.

TECHNICAL EDUCATION QUALITY IMPROVEMENT PROGRAMME (TEQIP) – PHASE-II.

3.13 TEQIP is a Centrally Sponsored Scheme and the Project cost is shared between the Central Government and State Government in the ratio of 75:25. 4 Government Engineering Colleges at Coimbatore, Salem, Karaikudi and Bargur and Computer Science Department of Manonmanium Sundaranar University, Tirunelveli have been selected under this scheme.

3.14 As a first installment, a sum of Rs.10.08 crore was released to these institutions in May, 2012. Each institution received Rs.2 crore and State Project Facilitation Unit received Rs.8 lakhs.

3.15 Rs.4.47 crore has been spent under TEQIP-II as per the details given below:

- Rs.2.87 crore for Purchase of Equipment, Machineries, Books and Journals to modernize laboratories and libraries.

- To encourage the students to pursue higher studies and research in Engineering, Rs.6000/- per month / per student is given to 192 M.E. students and Rs.12000/- per month / per scholar is given to 22 Ph.D scholars. An amount of Rs.52.7 lakhs has been incurred under the programme.

- Rs.35.4 lakhs for conducting faculty and staff development programmes.

- Rs.6.4 lakhs for conducting programmes for the improvement of academic and all round capacity of weak students in these institutions.

- Rs.27 lakhs for implementation of institutional and academic reforms such as obtaining AICTE-NBA Accreditation and UGC approved academic autonomous status.

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- Rs.38 lakhs for enhancement of Institution and Industry Interaction, Institutional Management Capacity and Research and Development activities and Institutional Consultancy activities.

3.16 During TEQIP Phase II, 163 papers were published in referred National and International Journals. Industry Institute Cells were formed in each institution and 33 MoUs were signed with industries.

3.17 Thiagarajar College of Engineering, Madurai, PSG College of Technology, Coimbatore, Coimbatore Institute of Technology, Coimbatore and University College of Engineering, (BIT campus) Tiruchirappalli, (a Constituent College of Anna University, Chennai) have been selected for TEQIP-II under sub-component 1.1 (Strengthening Institutions to improve learning outcomes and employability of graduates).

COUNSELLING FOR NON-TEACHING STAFF TRANSFER

3.18 Transfers of non-teaching staff of Colleges under the control of Directorate of Technical Education through the transparent counselling method was introduced for the first time from the academic year 2011-12. It was continued in the academic year 2012-13. It will be extended to the academic year 2013–14 also.

FINANCIAL ASSISTANCE TO ECONOMICALLY WEAKER STUDENTS

3.19 Financial assistance of Rs.46,50,000/- has been given to 186 economically weaker students under Chief Minister's Public Relief Fund at the rate of Rs.25,000/- each to enable them to continue B.E/B.Tech courses during 2012-13.

FACILITIES EXTENDED TO SRI LANKAN TAMIL REFUGEES

3.20 The children of Sri Lankan Tamil refugees in Tamil Nadu have been

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permitted for the first time to participate in counseling for admission through Lateral Entry to B.E./B.Tech. and Post Graduate courses viz., MBA/MCA/M.E./ M.Tech from the academic year 2011-12.

APPOINTMENT OF FACULTY IN GOVERNMENT ENGINEERING AND POLYTECHNIC COLLEGES

3.21 The Government have issued appointment orders to 151 Assistant Professors to be appointed in Government Engineering Colleges and 134 Lecturers to be appointed in Government Polytechnic Colleges and Special Institutions

3.22 The Government of Tamil Nadu have taken concrete steps to make Technical Education dynamic, demand driven, quality conscious and responsive to rapid technological development and the global needs for skilled human recourses.

4. UNIVERSITIES

The following are the Universities functioning under the aegis of Higher Education Department:-

1. University of Madras.
2. Madurai Kamaraj University.
3. Bharathiar University.
4. Bharathidasan University.
5. Alagappa University.
6. Mother Teresa Women's University.
7. Manonmaniam Sundaranar University.
8. Periyar University.
9. Thiruvalluvar University.
10. Tamil Nadu Open University.
11. Annamalai University.
12. Tamil Nadu Teachers Education University.
13. Anna University.

UNIVERSITY OF MADRAS

4.1.1 The University of Madras established on September 5, 1857 is one of the three premier Universities, the other two being the University of Calcutta and University of Bombay. Started as an examining body, research and teaching functions of the University were consolidated by the enactment of Madras University Act 1923.

4.1.2 The University has at present six campuses viz., Chepauk, Marina, Guindy, Taramani, Chetpet and Maduravoyal (Field Laboratory Campus), all within the Chennai Metropolitan area.

4.1.3 Consequent to Amendments to the Madras University Act, Law, Medical, Engineering Colleges and Colleges of Education which were earlier affiliated to the University have been shifted to the newly created Dr.Ambedkar Law University, Dr.MGR Medical University, Anna University and TamilNadu Teachers Education University respectively. The University of Madras was the first to introduce the concept of

autonomous college within the University system. There are 132 Colleges affiliated to the University of Madras, which include 15 Government, 24 Government Aided, 67 Self Financing Colleges, 3 Oriental Title Institutions, 5 Special Institutions, 16 Stand-alone Institutions and 2 Constituent Colleges.

4.1.4 There are 68 teaching and research Departments in the University of Madras which are grouped under 19 Schools.

Institute of Distance Education

4.1.5 The Institute of Distance Education established in 1981, offers 27 U.G. Courses, 20 P.G. Courses, 9 P.G. Science Courses and 34 other Courses. There are about 1,60,000 students on the roll.

4.1.6 OTHER ACTIVITIES

1. Agro Economics Research Centre (AERC)
2. Academic Staff College (ASC)
3. University Centre for International Relations [UCIR]

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4. University Industry Community Interaction Centre (UICIC)
5. University with Potential for Excellence Programme
6. Departmental Projects
7. Single window admission process
8. Establishment of Virtual University
9. Establishment of Pan African e-Network Project (offering M.Sc.(IT) and BBA for African students)

4.1.7 IMPORTANT ACHIEVEMENTS

1. Establishment of Language Laboratory in four campuses.

2. Collaboration with Academia, Industries and Corporate Sector in India and abroad through University Industry Community Interaction Centre (UICIC) and University Centre for International Relations (UCIR).

3. Digital library Initiatives in all the campus libraries.

4. Improved infrastructure facilities.

5. Implementation of Fee concession for Differently abled students in the University.

6. Madras University Free Education Scheme.

7. Students Insurance Scheme.

8. Establishment of 5 new Departments.

   (i)   Department of Women Studies
   (ii)   Department of Social work
   (iii) Department of Networking Systems and Information Technology
   (iv)   Department of Material Science
   (v)   Department of Bio-Informatics.

9. Establishment of 3 new Centres of Research.

   (i)   Centre for Cyber Forensics and Information Security
   (ii)   National Centre for Neurotoxicity Research

(iii) Research on Prison and Rehabilitation (Chair in the Department of Psychology)

10. Sports achievements for the Academic Year 2012–13.

University of Madras has won Championship in 8 events at the South Zone Inter University level and in 4 events at the National Inter University Level, 9 medals in Swimming and 8 medals in Athletics in National Inter University Level apart from several Silver and Bronze medals. The University has also organized South Zone Inter University and All India National Inter University Kabaddi Tournaments.

4.1.8 **ACTIVITIES / SCHEMES UNDERTAKEN DURING THE YEAR 2012-13**

1. Wi-Fi Connectivity in Guindy campus.

2. Health Centre and Students Amenity Centre.

3. Faculty and Students Exchange Programme and MOVER Programme.

4. Faculty Recharge Programmes and Post Doctoral Fellowship Programmes for teachers.

5. Academic Achievement Awards for teachers.

6. Visit to the National University of Singapore for Research Collaboration.

4.1.9 ACTIVITIES FOR 2013-14

1. University with Potential for Excellence (UPE) Phase II Programme.

2. Wi-Fi Connectivity in other campuses.

3. Extension of e-Governance Centre.

4. Strengthening manpower (Teaching and Non-teaching).

5. Establishment of specialized centres to carry out research on Renewable energy, Bio fuels etc. to

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complement and support Government of Tamil Nadu's Solar Policy 2012.

6. Introducing the Twinning Programme for Institute of Distance Education (IDE) which envisages a tie-up between the Institute of Distance Education, Madras University and Colleges/Institutions of repute.

7. The University will conduct Open House Day to reach out to community schools in the region during their academic recess and organize one day university tour.

8. As part of extension activity, University will implement `Learn and Teach the Citizens of Chennai Slums' adopting five Corporation schools.

9. Field Centres will be started in Kalvarayan Hills to address Social Empowerment through Folk Communication and Media Literacy Skills for the Tribals.

MADURAI KAMARAJ UNIVERSITY

4.2.1   Madurai Kamaraj University, a premier institution devoted to the cause of teaching, research and extension was established by Madurai Kamaraj University Act of 1965. It is recognized as an University with Potential for Excellence by the University Grants Commission. The University has a total of 75 Departments grouped under 20 Schools committed to advanced learning.   There are 84 colleges, which include 2 Government Colleges and 31 Aided Colleges, 40 Self-Financing Colleges, 6 Constituent Colleges, 1 University College, 4 University Evening Colleges and 18 Approved Institutions attached to this University.

4.2.2   Over one lakh students (1,10,088) are on the roll.   Besides, it has a Distance Education Directorate in which a total of 69,784 students have been enrolled.

CURRICULUM DEVELOPMENT

4.2.3 As per the policy decision of the Higher Education Department of Government of Tamil Nadu, a curriculum development cell has been established in the University availing the financial support of the Government. Curricula have been redesigned based on the guidelines fixed by the UGC from time to time. To meet the global needs, subjects such as Nano technology, Genomics, Disaster Management, e-Commerce, Women and Youth empowerment, Human Rights, Environmental and Management studies have been given special attention. The syllabi for 52 new courses have been designed in the last 2 years to enhance the employability of students.

EMPLOYABILITY

4.2.4 Students from the University Departments and Affiliated Colleges have benefitted under "Earn While you Learn" Scheme sanctioned by the UGC under University with Potential for Excellence (UPE) Programme. Modern Students' Amenities Centre was established under UGC-UPE Scheme for

the benefit of students in and around the University.

EXTENSION ACTIVITIES

4.2.5 The University carries out extension activities in the neighbouring villages. Science awareness programmes are conducted for school children periodically. Underprivileged groups are given training for competitive examinations by the Department of Youth Welfare Studies. Nearly, 1563 students benefited and 520 women were trained for self employment by the Department of Adult Education.

CHOICE BASED CREDIT SYSTEM

4.2.6 The University has revised the curricula under the Choice Based Credit System to include two credit courses for PG students in Communication Skills and Personality Development.

4.2.7 The following Programmes have been launched in the University as per the Higher Education policy of the

Government at a cost of Rs.1.15 crore.

i) Establishment of Smart Class rooms with Video Conferencing facilities, Foreign Language Laboratories, Entrepreneurship cum Skill Development Centre, Curriculum Development Cell and Inviting renowned Professors from Foreign Universities.

ii) A PG extension centre is to be established in Virudhunagar in which five job oriented courses will be started. The University is aiming at Energy Conservation, Water Recycling, Solid Waste Management by using Nano Technology. The University has also planned energy audit assessment.

NATIONAL AND INTERNATIONAL SEMINARS

4.2.8 All the schools in the university organized National and International level Seminars and Conferences which could facilitate the visit of Professors from abroad to the

Madurai Kamaraj University. A National Level seminar on 'Top Class Institutional Facilities in Universities and Colleges' was held. An International Seminar on 'Emerging Women in India Since Independence' was organized by the Department of Youth Welfare Studies, in 2013.

NEW SCHOOLS CREATED

4.2.9 In tune with the Higher Education policy of the Government, two new schools namely School of Youth Empowerment and School of Information Technology have been created in the University in 2013.

MEMORANDUM OF UNDERSTANDING SIGNED (MoU)

4.2.10 An MoU was signed between Auroville Foundation at Pondicherry and the Registrar, Madurai Kamaraj University on 21.7.2012 to promote co-operation in areas of mutual interest.

4.2.11 The Department of Bio-Technology has sanctioned Rs.1.2 Crore, on 26.3.2013 to the Department of

Genetics, School of Biological Sciences and Department of Bio-Technology for the project titled "DBT–Network Project on Brucellosis". In this project, novel diagnostic tools and vaccines will be developed.

4.2.12 Steps are being initiated to take the University from the present status of University with Potential for Excellence to the status of University of Excellence.

BHARATHIAR UNIVERSITY

4.3.1 Bharathiar University was established in Coimbatore in February, 1982 under the Bharathiar University Act, 1981.The jurisdiction of the University covers the districts of Coimbatore, Tirupur, Erode and the Nilgiris. There are 34 Teaching and Research Departments which are grouped under 13 Schools. The University has been Re-accredited with "A" status by National Assessment and Accreditation Council. University Grants Commission supports 7 departments under Special Assistance Programme (SAP), Department of Science and Technology, Government of India supports 6 departments under Fund for Infrastructure in Science and Technology (FIST) programme. The University has 107 affiliated colleges which include 6 Government, 3 Constituent, 16 Government Aided and 82 Self Financing Colleges. In addition, there are 30 Research Institutes. All these Institutions and School of Distance Education of Bharathiar University cater to the educational needs of 2,50,829 students and Research Scholars.

4.3.2   Buildings worth Rs.29.22 crore have been completed which include International Students Centre, Guest House, Management Block, Examination Hall, Book storage godown, Indoor Stadium, Office for the Controller of Examinations, Ladies' Hostels, Physical Science Block and Academic Staff College Hostel.

PROJECTS

4.3.3 Department of Science and Technology, Government of India under the Promotion of University Research and Scientific Excellence (PURSE) scheme has awarded a grant of Rs.9 crore for 3 years. In July 2011, the University received sanction for a grant of Rs.3 crore for the first year. 32 major projects were sanctioned in various disciplines by several funding agencies like University Grants Commission, Indian Council of Social Science Research, Board of Research in Nuclear Science, Defence Research and Development Organization, Defence Institute of Physiology and Allied Sciences, Defence Research Lab, Department of Science and Technology,

Government of India and Council for Scientific and Industrial Research.

SCHEMES

4.3.4 Government of Tamil Nadu identified Bharathiar University to create and establish a state-of-art advanced research laboratory in Physics at an expenditure of Rs.2.5 crore, to enhance the existing research potentials and to offer high quality research programmes.

4.3.5 The Curriculum Development Cell (CDC) has organized an orientation cum workshop programme of one week duration and one day Academia Industrial meeting. Under the scheme of inviting renowned professors, Dr.Willey Painiyaye from France visited the Linguistics department.

4.3.6 The Defence Research and Development Organization (DRDO) has established a Centre for Life Sciences with an investment of Rs.20 crore which provides a platform for advanced research in life sciences.

SPACE FESTIVAL

4.3.7 Space festival was organized from 9th - 14th July, 2012 with the support of NASA, ISRO and DRDO on a grand scale at a cost of Rs.40 lakhs for promoting research awareness among school and college students.

ACTIVITIES FOR 2013-14

4.3.8

- An Advanced Research Centre for Nano Pharmacology has been established to carry out Research in the area of Biosensors for detecting Dengue, Chikungunya, Bird Flu, Swine Flu Viruses and developing drugs for these diseases.

- The University plans to pioneer research in atmospherical changes and in Earth Sciences. Hence, two teaching and research departments (Geography and Geology) are to be established.

- To create a centre for scientific computation with advanced technology.

- To offer innovative courses such as MBA Global Management and MA English Studies (Cognition).

- It is proposed to improve the existing health centre with facilities like X-Ray, Clinical lab, ECG and Medical Stores.

- The University has started the initiative for the generation of solar power.

BHARATHIDASAN UNIVERSITY

4.4.1 Bharathidasan University was established in 1982 in the name of the great revolutionary Tamil Poet, Bharathidasan. Bharathidasan University is making rapid strides in academic, research and extension activities. The University has 17 Schools, 57 Departments / Specialized Centres and offers 108 courses. The University has 133 affiliated Colleges comprising 17 Government Colleges, 20 Government Aided, 9 Constituent, 72 Self-financing colleges along with 15 other approved institutions. About 2,11,500 students are enrolled in the above Colleges.

4.4.2 The syllabi for 52 new Courses were designed during the last 2 years. Bharathidasan University has initiated 'Towards World Class Curriculum', a program funded by Government of Tamil Nadu to achieve Vision 2023 of **Hon'ble Chief Minister** of Tamilnadu. The Centre for Curriculum Development organized an exclusive workshop for Chairpersons and Members of Boards of Studies on "Reform of

Undergraduate and Postgraduate curricula for enhancing employability". A new Centre for the differently abled was started with the aim to include the differently abled persons into the mainstream society and the university has taken steps to assist them by identifying their potentials and helping them become self-reliant.

4.4.3 With a vision to cater to the educational needs of the rural community, four Constituent Colleges have been established by the Government of Tamilnadu during the year 2011 at Srirangam, Nannilam, Vedaranyam and Thiruthuraippoondi within the jurisdiction of the Bharathidasan University. They were inaugurated by **Hon'ble Chief Minister** through video conferencing. The Constituent College of Nagapattinam was started in the month of June 2012 with a student strength of 300 in the first year. A total number of 9631 Students are studying in the 9 Constituent Colleges. Digital Library and N-List Facility have been provided in the Constituent Colleges at Srirangam and in Perambalur.

UNIVERSITY INFORMATICS CENTRE

4.4.4 The University Informatics Centre (UIC), the technology arm of the Bharathidasan University, offers leading-edge information technology environment to students through a comprehensive infrastructure and network technology enabled laboratory.

4.4.5 A Centre for Knowledge Repository has been established in the University Informatics Centre for the benefit of students, faculty and staff of the University and its affiliated Colleges to enhance digital learning through e-resources, to help faculty in implementing innovative approaches in teaching, to organize and share digital contents efficiently and to disseminate knowledge to a target audience.

SCHOOL-UNIVERSITY-INDUSTRY TIE-UP SCHEMES (SUITS)

4.4.6 A total number of 27,160 school students have been enrolled during February–March 2012 in the Certificate courses in (a) Computer Basic, (b) Office Automation, (c) Programming

Techniques, (d) C Programming, C++ Programming, of whom more than 99.65% students came out successfully in the examinations.

WOMEN INVOLVED IN SANITATION AND HYGIENE (WISH)

4.4.7 A Women friendly forum called "Women Involved in Sanitation and Hygiene (WISH)" co-ordinated by NSS cell, in association with the Department of Social Work and Department of Women Studies promotes health consciousness among urban and rural women. An agreement has been signed with BHEL, Tiruchirappalli under Corporate Social Responsibility Project. BHEL has sanctioned Rs.55 lakhs for this project.

4.4.8 The Bharathidhasan University – FEST, a convergence of the cultural teams of the affiliated Colleges was held during the month of October 2012. In this festival, 1110 students from 42 affiliated Colleges participated.

4.4.9 Government of Tamil Nadu has identified Bharathidasan University as one of the two centres in the State to

conduct SAKSHAM Programme during the month of June 2012 for non IT (Information Technology) faculty members.

4.4.10 **ACTIVITIES FOR 2013-14**

- Centre for Remote Sensing of the University will be upgraded at a cost of Rs.2.5 crore.

- Non-conventional energy generation is to be implemented by tapping Solar, Biomass and Wind Energy in the University campus to meet out its own electricity requirements.

- Creation of Bharathidasan Institute of Fine Arts, linking Electronic Media and Visual Communication.

- Integration of job literacy in the different domains of UG and PG curricula for enhancing employability of the stakeholders.

ALAGAPPA UNIVERSITY

4.5.1 Alagappa University was established in the year 1985. The University strives to achieve its motto "Excellence in Action" with relevant academic and research programmes with modern curricula and pedagogy.

4.5.2 Alagappa University has 10 Schools of Learning, comprising 22 Departments, 9 Centres, 3 Constituent and 5 Evening Colleges. Besides, it has 26 Affiliated Colleges which includes 8 Government, 5 Government Aided and 13 Self Financing Colleges, spread over in the two Districts of Ramanathapuram and Sivagangai. Alagappa University has four UGC-SAP Departments and three DST-FIST Departments.

ACHIEVEMENTS

4.5.3 Alagappa University is ranked 3rd among the top 50 universities in the country under SCOPUS database in International Collaborative Research publications. In appreciation, Department of Science and Technology, Government of India has allotted Rs.6 crore for the research programmes under Promotion of

University Research and Scientific Excellence (PURSE) scheme. The Ramanujan Centre for Higher Mathematics functions as a hub for studies in Higher Mathematics and Research. The **Hon'ble Chief Minister** of Tamil Nadu had declared open, through Video Conferencing, buildings worth Rs.5 crore and laid the foundation stone for various buildings at an estimated cost of Rs.3 crore in February 2012. The University was reaccredited with 'A' grade by NAAC in November 2011 with Cumulative Grade Point Average (CGPA) of 3.21 points on a four point scale, the highest among State-run Universities in Tamil Nadu.

4.5.4 The University has established Alagappa University Research Fund (AURF) with a corpus of Rs.5 crore to support Overseas Collaborative Research projects.

4.5.5 Speedy action has been taken on the implementation of schemes such as Creation of Centre for Technical and Academic Writing, Centre for Multi-Modal Material Production for Differently-abled, and University Business

Collaboration Centre, as per the guidelines of the Government.

4.5.6 ACTIVITIES FOR 2013-14

- Two Innovative Programmes, viz. PG Diploma in Structural Pharmacogenomics and MBA (Logistics Management) sanctioned under UGC Innovative Programme will be started during 2013-14.

- Wi-Fi facilities are being planned to strengthen soft-infrastructure and to ensure total ICT enabled learning environment in the University campus.

- Plans are in place to install Captive Solar Energy Generation Panel and Equipment to meet HT electricity requirements.

- Re-designed MBA programme with 15 specializations will be offered through Distance Education Mode from 2013-14.

MOTHER TERESA WOMEN'S UNIVERSITY

4.6.1 Mother Teresa Women's University was established in Kodaikanal in 1984 with its motto "Towards Equal Status" for women. The University strives for a holistic development of women in all spheres, through education. The major mission of the University is to empower women, through Teaching, Research and Extension. It offers courses at various levels –Ph.D., M.Phil., P.G., U.G. in Arts and Science and B.Ed., and M.Ed. It also offers 31 Courses through distance mode. The University has 18 academic departments with students at the Post-Graduate and Research levels. There are 11 Affiliated Colleges which include 2 Government, 2 Aided, 2 Constituent and 5 Self Financing Colleges for women in Theni and Dindigul Districts, and 8 Community Colleges functioning to cater to students of rural and tribal areas.

4.6.2 **ACHIEVEMENTS**

- The Department of Education is recognized by UGC as a Centre for Excellence.

- The Department of Education offers B.Ed. in Special Education with the approval of Rehabilitation Council of India (RCI).

- Students from the Department of Education serve as "Scribes" on voluntary basis for the visually challenged students in Kodaikanal.

- The Department of Education is also the Nodal Agency to monitor Sarva Shiksha Abhiyan in seventeen Districts of Tamil Nadu under the aegis of the Ministry of Human Resource Development, Government of India.

- The Curriculum Development Cell has enabled the Departments of Commerce,English, Mathematics, Management Studies, Chemistry,

Historical Studies and Tourism Management and Tamil Studies to develop and enrich curricula with International and National experts.

- Institution - Industry linkages have been created with companies like, Nokia India Private Limited, City Bank, Mazenet Tally Academy, State Bank of India, Smart Play Technology, Bangalore, Regional Coffee Research Station, Thandikudi, Kodaikanal, for placement opportunities.

- Incubation and Technology Transfer Center organized a one day seminar on "Business opportunity and guidance"; Conducted entrepreneurship awareness camps in skill training programmes like jewellery making, pot designing, carving, food processing, mushroom cultivation, etc., for all students.

- Centre for Technical and Academic Writing organised

orientation programmes for students, teaching and non teaching staff.

- Centre for Multi Modal Material Production trained students of B.Ed., Special Education in preparing educational aids for teaching special children.

- On the eve of International Women's Day, the University organized a number of programmes like the conference on "Violence against Women and Children- Reforms and Remedies", "Business intelligence tools for Women Entrepreneurs", production of short film (competition) etc.,

- Four Books and a University Journal titled "Gender and Progress" were released by the Hon'ble Minister for Higher Education on 10th March 2013.

- An amount of Rs.2 crore has been sanctioned to various departments by UGC and other

funding agencies for research projects.

- Department of Education has signed Memorandum of Understanding (MoU) with Ministry of Human Resource Development (MHRD) to monitor - Rashtriya Madhyamik Shiksha Abhiyan (RMSA), to achieve the goal of Universalization of Secondary Education (USE).

- The campus is fully Wi-Fi enabled.

- A health centre (Gym) and Net-café (internet centre) have been opened for the welfare of the students, staff members, and women of local community.

- Students of Mother Teresa Women's University and its affiliated colleges won 1st prize in South Zone Inter University Kabaddi tournament and secured 4th place in All India Inter University Kabaddi tournament. Students received 6 gold medals,

10 silver medals and 12 bronze medals in All India Women's Athletic Meet Championship organized by Karnataka State Women's University, Bijapur.

4.6.3 ACTIVITIES FOR 2013-14

- Total automation of the University administration.

- To establish a Technology Park in the University Campus.

- The University plans to sign a Memorandum of Understanding with the Universities abroad, for research collaborations.

- The University will go eco-friendly by developing a green campus, with a herbal and medicinal garden.

- To coach students to clear ICMA/ACS, NET/SLET and other competitive exams.

- The University focuses on "Girl Child Abuse". It has been planned to organize campaigns, training programmes for School, College, University teachers and students and to conduct research studies relating to this subject. Preparation of a documentary film on this subject is underway.

- The University proposes to start a Centre for Rural Development and a Capacity Building Centre for Women.

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MANONMANIAM SUNDARANAR UNIVERSITY

4.7.1 Named after a distinguished professor of Philosophy, Prof. P.Sundaram Pillai (1855-1897), who composed, '*Manonmaniam',* of which, the State song of Government of Tamil Nadu (*Tamil Thai Vazhthu*), is a part, the Manonmaniam Sundaranar University was established. The University is now functioning with 73,325 students and 4,164 faculty members. The University aims to reach the unreached sections of the society, and is located at *Tirunelveli,* with two campuses at *Alwarkurichi* and *Rajakkamangalam.*

4.7.2 There are 26 departments in the University and 62 affiliated Colleges, which include 2 Government, 25 Aided Non-Autonomous, 28 Self-Financing, 7 Government Aided Autonomous, and 4 Constituent colleges.

4.7.3 There are also 6 Manonmaniam Sundaranar University Colleges started in socio-economically backward regions viz., Nagampatti, Sankarankovil, Puliankudi, Govindaperi,

Thisayanvillai and Panagudi, with the aim to educate and empower, the poor students at an affordable cost.

ACADEMIC PROGRAMMES

4.7.4 The University offers 34 P.G. Courses, 24 M.Phil Courses and 7 P.G. Diploma Courses in the University Departments. Certain courses offered are at the cutting edge of sciences, technology and societal requirements such as Nano Science, Bio-Technology, Geo-Technology, Pharamaceutical Chemistry, Coastal Economics, Bio-informatics, Criminology and Criminal Justice, Electronics Media and Human Rights. The curricula for these Courses have been framed in accordance with the industrial needs.

4.7.5 **ACHIEVEMENTS**

- The University has signed a Memorandum of Understanding (MoU) with the Arhus University, Denmark, for Academic Exchange of teachers and students.

- Two Professors from the Department of Mathematics were awarded Tamil Nadu Scientist Award (TANSA).

- The prestigious UGC Basic Science Research (BSR) Fellowships were allotted to Mathematics Department (10 Nos.) Statistics Department (10 Nos.), Centre for Marine Science & Technology (CMST) and Physics Department (5 each).

- UGC Special Assistance Programme (SAP) has been received by two departments, namely Sociology and Centre for Marine Science & Technology.

- The Departments of Computer Science and Chemistry have received level 1 and level 2 awards respectively from the Government of India, Department of Science and Technology.

- The Department of Computer Science has received an amount of Rs.2 crore, under the Technical

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Education Quality Improvement Programme (TEQIP) of World Bank.

- Fifteen Faculty members from this University have visited thirteen countries – including USA, Canada, Italy, Sweden, the Netherlands, UK and China. Seventeen Foreign visitors/Faculty members visited the various departments of this University during the last academic year. A Professor of English of this University was awarded Jubilee Commonwealth Academic Fellowship.

- In order to sustain the environment and make the University look greener, a massive tree plantation programme was carried out during October 2012. Two thousand saplings were planted in the main campus of this University.

- The Manonmaniam Sundaranar University College at Govindaperi, has received Rs.1.43 crore for construction of classrooms, Rs.8.5 lakhs for construction of the cycle stand from the Member of

Parliament's Local Area Development Fund.

- The University has initiated steps to establish Post Graduate Extension Centre at Kanniyakumari to offer PG courses in Engineering, Maths, Bio-Medical informatics, Computer Science and Management Studies.

COMMUNITY COLLEGES

4.7.6 The Manonmaniam Sundaranar University has 18 Community Colleges offering 15 job-oriented, work-related and skill-based one year Diploma courses. Some of the courses offered through Community Colleges are Diploma in Computer Applications, Four-Wheeler Mechanism, Two-Wheeler Mechanism, Child Care Education, Health Assistance, Laboratory Assistance, Air Conditioning and Refrigeration, Computer Usage for Office Management, Varma and Massage, Foreign Trade and Import-Export Documentation, Air Travel Ticketing, Silambam and Martial Arts, Hotel Management and Catering Science. With the aim of "Including the Excluded and Giving the Best to the Least", the

Community Colleges provide skill based, livelihood - enhancing education and eligibility for employment to the disadvantaged and under privileged. Providing appropriate skills development in collaboration with local industries leading to gainful employment is the major aim of Community Colleges.

4.7.7 **FUTURE PLANS**

- Three Career Oriented Programmes, on 'Counselling Special Children", 'Developing Life Skills' and 'Security Management', will be offered through integrated PG course with funds from the UGC.

- Two new buildings, being built in the university, will have solar panels to meet their power needs, keeping in line with the current Government Policy.

- The University plans to develop a Centre for Environmental Monitoring, Sustainable Development and Renewable Energy Sources.

PERIYAR UNIVERSITY

4.8.1 Periyar University, named after the great Social Reformer, E.V.Ramasamy popularly known as "Periyar" was established in the year 1997 at Salem. The Periyar University caters to the higher educational needs of students in of Salem, Namakkal, Dharmapuri and Krishnagiri Districts. About 1,52,000 students have enrolled for various under-graduate and post-graduate courses offered by Periyar University through 22 University Departments, three Research Centres, 80 affiliated colleges of which 10 are Government, 4 Aided, 5 Constituent and 61 Self-Financing Colleges.

4.8.2 The University has also setup one Post-Graduate Extension Centre at Dharmapuri. There are 14 Community Colleges, which cater to the felt needs of the rural students. Periyar University offers 104 courses for undergraduate and postgraduate students.

TAMIL SCIENCE CONGRESS

4.8.3 Periyar University organized 12th Tamil Science Congress. Around 1500

participants including Professors, Scientists, Experts and Research Scholars attended the Science Congress. His Excellency, the Governor of Tamil Nadu, inaugurated the Congress.

CAREER GUIDANCE AND COUNSELLING CELL

4.8.4 Career Guidance and Counselling Cell of Periyar University has made remarkable achievements. 1015 students were placed and 8500 students were trained through these recruitment drives.

PERIAS

4.8.5 The Periyar Institute of Administrative Studies, (PERIAS) has organized various programmes to impart knowledge, practical training and orientation to the Civil Services aspirants.

VILLAGE ADOPTION SCHEME CENTRE

4.8.6 The Village Adoption Scheme Centre (VASC) conducted environment awareness, health and family welfare programmes in Sangeethappatti Village.

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DEPARTMENT OF PHYSICS – CENTRE FOR EXCELLENCE

4.8.7 Recognizing the Academic and Research output of the Department of Physics, Government of Tamilnadu identified Periyar University to create and establish a state-of-art advanced research laboratory in the field of Physics at an expenditure of Rs.2.5 crore to enhance the existing research potentials on par with international standards as well as to offer high quality research programmes.

4.8.8 ACHIVEMENTS

- The former President, Hon'ble Dr.A.P.J.Abdul Kalam opened the Curriculum Development Cell, Centre for Bio-diversity and Forest Studies and High Tech Research Laboratory in Physics and presented several awards to teachers and students in the month of December 2012.

- The Department of Computer Science has received a grant of

Rs.34 lakhs under Special Assistance Programme of UGC.

- 12 Endowments of Rs.2 lakhs each were created by 12 Philanthropists in 12 Departments.

- The Departments of Geology, Physics and Chemistry received a sum of Rs.38 lakhs, Rs.49 lakhs and Rs.37 lakhs respectively under the Fund for Improvement of Science and Technology scheme (FIST) of the Department of Science and Technology (DST), Government of India.

- The Department of Economics organized the Annual Conference of the Association of Economists of Tamil Nadu.

- The Department of Chemistry organized an International Conference on Bio-Organic Chemistry.

- The Periyar Institute of Management Studies has established Entrepreneurship Skill

Development Cell in all the Constituent Colleges. A two day workshop was organized for the coordinators of these Cells.

4.8.9 ACTIVITIES FOR 2013-14

- Setting up of a satellite campus.

- Focus on 'Research' to get more patents in frontier areas like Microbiology, Bio-Technology etc.

- Plan to install Solar Water heating and Solar Photovoltaic Power Systems in University Buildings at a cost of Rs.75 lakhs.

THIRUVALLUVAR UNIVERSITY

4.9.1 Thiruvalluvar University was established in the year 2002. The University was started with 52 affiliated colleges in its jurisdiction viz. Vellore, Tiruvannamalai, Villupuram and Cuddalore Districts. At Present 106 Colleges are affiliated to this University, out of which 10 are Government, 9 Aided, 5 University Constituent Colleges, 1 stand alone MBA institution and 78 Self-financing Arts and Science Colleges. There are also 3 Oriental Title Colleges.

4.9.2 Two Constituent Colleges were established during the academic year 2011-12 at Kallakurichi in Villupuram District and at Tirupattur in Vellore District to cater to the needs of the rural and economically weaker sections of the society. The Thiruvalluvar Institute of Distance Education (TIDE) was established during the academic year 2011-12.

ACHIEVEMENTS

4.9.3 The University has recognized the following 'Research Centres' in Christian Medical College, Vellore to conduct Research Programmes:

- Centre for Stem Cell Research, Department of Biotechnology.

- Centre for Biostatistics Resource and Training, Department of Biostatistics.

- Centre for Molecular Biology, Department of Biotechnology.

4.9.4 Students of the affiliated colleges of Thiruvalluvar University participated in South Zone and All India Inter University Level Sports Competitions. They were Runner ups in South Zone and won the Cup in All India Inter University Level Football Tournament for Women.

ACTIVITIES FOR 2013-14

4.9.5
- The recruitment of faculty members is under process for obtaining 12(B) Status from UGC.

- To construct an auditorium and hostels for boys and girls.

TAMIL NADU OPEN UNIVERSITY

4.10.1   The Tamil Nadu Open University (TNOU) was established in 2002. The academic arm of the University has 13 Schools ably supported by 5 Service Divisions and one Centre for Electronic Media Production and Research. The University has now registered an impressive growth with 103 academic Programmes, one-fifth of which are in the skill development/vocational areas, and a cumulative student population of about 4.5 lakhs.

4.10.2   Its instructional system comprises quality print materials in self-learning format, digital content through stand-alone CDs, face-to-face contact sessions, continuous assessment and term-end examinations.

4.10.3   The learning needs of the students are catered to, through a massive network of 604 learner support centres, comprising 204 Community Colleges, 153 Computer Programme Centres, 144 Learning Resource Centres, 33 Off-Campus Centres, 28 Learning Centres, 11 B.Ed. (Special Education)

Programme Centres, 10 University Coordinating Centres, 10 B.Ed. General Programme Centres, 8 Jail Centres and 3 Counselling and Psychotherapy Centres.

4.10.4 Most of the operations of the University have been brought under e-Governance for efficiency and transparency. The University is poised to embark on technology enhanced learning environments. This is the first University in the State to have produced self-learning materials and implemented Credit System, based on expected learner-input/workload. Some of its Study Materials have been adopted on royalty basis by various other Universities, including Dr.B.R.Ambedkar Open University, Hyderabad.

4.10.5 ACHIEVEMENTS

- Provision of Vocational Programmes to Jail inmates, with fee concession.

- Preparation of digital content (i.e., multi-media CD-ROMs) for various academic Programmes.

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- Production of multi-media content pertaining to Sangam Literature.

- Establishment of two Zonal Centres, one each in Srirangam and Coimbatore.

- As per the announcement made by the **Hon'ble Chief Minister** in the Assembly, 32 Constituent Community Colleges, one in each District are to be established. In the first phase, 5 Constituent Community Colleges have been established in Chennai, Coimbatore, Dharmapuri, Madurai and Tiruchirappalli.

- Activities relating to multi-modal material production for the differently-abled, are in progress.

- The State Government have identified the university as the Nodal Agency for carrying out the Ministry of Human Resource Development Scheme of Community Colleges in the State.

- English Professor went to Poland as a visiting faculty at the Jan Dlugozs University.

4.10.6 **ACTIVITIES FOR 2013-14**

- Establishment of 15 additional Constituent Community Colleges.

- Installation of solar panels in the Administrative Block.

- Completion of the construction of the Academic Block and the Block to house the Studio, Lab, Warehouse and International Hostel under green building norms, with solar energy support.

- Implementing Technology Enhanced Learning, Blended Learning Environment including Digital Library Services, Open Educational Resources (OERs) and Virtual Language Lab.

ANNAMALAI UNIVERSITY

4.11.1 Annamalai University was established in 1929. This University is an Unitary University with all the departments of study in the same campus. There are presently 50 departments of study under 10 faculties.

INTERNAL QUALITY ASSURANCE CELL

4.11.2 An Internal Quality Assurance Cell has been set up to monitor the quality of academic output. The Departments of Study are encouraged specifically to conduct national and international seminars, symposia, workshops, refresher courses and conferences so as to expose teachers of the University to new trends in teaching and research at the global level.

4.11.3 The Students Placement/ Training Cell, Centre for Rural Development, National Service Scheme, Red Ribbon Clubs, Yoga Centre Services, Social Service League and National Cadet Corps are active in the university.

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TAMILNADU TEACHERS EDUCATION UNIVERSITY

4.12.1 Tamil Nadu Teachers Education University was established in the year 2008 for promoting excellence in Teacher Education. In the present scenario of rapid economic growth, international competitiveness and rising expectation of youth, the teacher education university is endeavoring to produce teachers of unequalled potential. The university has under its jurisdiction 674 colleges of Education which includes 7 Government, 14 Government Aided and 653 Self financing Colleges. There are nearly 72,000 B.Ed., 4,600 M.Ed, 148 M.Phil and 174 Ph.D students studying in the affiliated colleges of the University.

4.12.2 OBJECTIVES

- The objectives of the university are to oversee the establishment and functioning of colleges of education in accordance with the norms and standards prescribed by National Council for Teacher Education, and Government of Tamil Nadu.

- To organize seminars, workshops, symposia for teacher trainees on emerging trends in Teacher Education.

- The University is striving to harness Information and Communication technologies to enrich the teaching process, extend diversified delivery system and to improve research quality. The university will endeavour to foster curricular and pedagogical reforms to make teacher education relevant and meaningful.

- In the interest of "larger" education, the university will strive to encourage student teachers to motivate students to join N.S.S., Scouting and guiding activities, Red Cross etc. to serve the Nation and its people.

4.12.3 **ACTIVITIES UNDERTAKEN DURING 2012-13**

- There are 13 Colleges of Education offering M.Phil Degree Programme, out of which, 12 Colleges of Education have been

recognized as Research Centres to offer Ph.D Degree Programme.

- The University has organized four seminars/conferences in the year 2012 in collaboration with Government and Aided Colleges of Education.

- One GB connectivity has been installed in Tamil Nadu Teachers Education University campus. It has connected internal offices of the University and will be extended to all the colleges of education affiliated to this University.

- The University has constituted a Research Forum comprising of 13 academicians to monitor effectively Research Activities in the University and in the affiliated colleges of education.

4.12.4 ACTIVITIES FOR 2013-14

- The University is in the process of establishing the following 6

departments with 42 faculty members to obtain 12(B) status from University Grants Commission:-

(i) The Department of Pedagogical Sciences,
(ii) The Department of Value Education,
(iii) The Department of Educational Psychology,
(iv) The Department of Educational Technology,
(v) The Department of Curriculum Planning and Evaluation,
(vi) The Department of Educational Planning and Administration.

• The University proposes to organize an International Conference during the month of May 2013 focusing on "Strategies and Approaches needed for Generation 'Y' Learners".

• The University proposes to publish International Online Quarterly Journal on "Educational Innovations and Practices".

ANNA UNIVERSITY

4.13.1 Anna University was established on 4th September, 1978 as an unitary type University by integrating four well known technical institutions in the city of Chennai namely, College of Engineering, Guindy, Alagappa College of Technology, Madras Institute of Technology and School of Architecture and Planning. During the year 2001, Anna University was converted to an affiliating type of University with 250 Engineering Colleges in the State. Five Anna Universities of Technology at Tiruchirappalli, Coimbatore, Tirunelveli, were established in 2007 and at Chennai and Madurai during 2010 and Anna University was reverted as an unitary type in June, 2010. To restore the past glory of Anna University, the five Anna Universities of Technology were merged with Anna University by an Act which came into effect from 1st August, 2012. Anna University is today one of the largest technological Universities with 553 Engineering Colleges under one Umbrella. The merger has ensured quality of high standards in the realm of Engineering Education.

4.13.2 **ACHIEVEMENTS**

- As one of the largest affiliating Universities, Anna University has successfully conducted centralized semester examinations covering about 6.50 lakhs students during the year 2012-13. Among the 1,44,707 students/scholars who are qualified to receive the degree this year, 1,10,460 Graduate students, 33,563 Post Graduate students, 622 Ph.D scholars, 31 M.S. Research Scholars and 31 M.Phil Scholars have received their degrees.

- Anna University offers 38 UG and 83 PG courses in University Departments, 37 UG and 60 PG courses in affiliated Colleges.

- UG full-time programmes in Tamil Medium for B.E. (Civil Engineering) and B.E. (Mechanical Engineering) programmes are also offered. 25 Text books in Tamil have been published for the benefit of students.

- 4050 Ph.D. and 113 M.S. research scholars are on roll including foreign nationals under Indian Council for Cultural Relations (ICCR) and Quality Improvement Programme (QIP) sponsored by AICTE. A total number of 1380 Ph.D. and 34 M.S. research scholars were admitted during 2012-13.

- Anna Centenary Research Fellowship instituted from University funds is given to 150 Ph.D. Scholars every year since 2012 (Rs.12,000/- per month as stipend and Rs.25,000/- per annum as contingency grant).

- For pursuing innovative research, an incentive of Rs.25,000/- has been instituted for 'Best Researcher/Best Consultant' from the university funds. This year, 7 faculty members were honoured.

- The faculty and students of the Department of Aerospace Engineering have designed and developed an Unmanned Aerial Vehicle "DHAKSHA", which bagged the first prize in UAVFORGE-Air

Vehicle Challenge during May 2012 in USA. Recently, the vehicle has been effectively used by the Government of Tamil Nadu for aerial surveillance.

- The University has signed 9 Memorandum of Understandings with National and International Universities/ Organizations. 33 students from various International Universities and 20 students of Anna University took part in a student-exchange programme for internship and a semester abroad programme. 56 Overseas Professors with expertise in diverse fields are on roll in the Anna University for delivering lectures.

- Anna University places equal emphasis on both teaching and research which has resulted in the healthy h-index of 59.

- **Grants received during the year 2012-13**

    o Rs.14.2 crore was received from University Grants Commission and Department

and Science and Technology, Government of India.

o Rs.18 crore for Extramural funds for projects of faculty members from the State, Industry and Central agencies.

o Rs.17.5 crore for Consultancy Projects.

- The following new schemes have been granted:

UGC-Special Assistance Programmes (SAP)	- 6
UGC-Basic Scientific Research (BSR)	- 2
UGC-Faculty Fellowship	- 4
DST-Funds for Improvement of Science and Technology	- 5
UGC-Faculty Recharge Programme	- 3

- To monitor the quality of teaching-learning process, "Academic audit" has been initiated.

- Centre for Faculty Development is equipped with capacity to offer faculty training to 71 colleges through EDUSAT.

- The year 2012 witnessed the following unprecedented construction activities: -

  o Hostels for Boys and Girls, measuring 82,100 sq.ft. to accommodate 630 students in 210 Rooms have been constructed at a cost of Rs.13.1 crore.

  o International Hostels for Boys and Girls to accommodate 288 students in 144 rooms have been constructed with a plinth area of 70,050 sq.ft. at a cost of Rs.14 crore.

  o Buildings measuring 1,31,035 sq.ft. for Teaching and Non-Teaching staff quarters have

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been completed at a cost of Rs.20.96 crore.

- o Buildings measuring 23,230 sq.ft for Centre for Disaster Mitigation and Management have been completed at a cost of Rs.2.69 crore.

- The NSS cell, which has 373 units, has organized several socially relevant programmes. Similarly, NCC and the Youth Red Cross (YRC) have conducted several welfare programmes.

- ANNA Community Radio at 90.4 MHz is India's first Community Radio run by the Educational Multi-media Research Centre (EMMRC) funded by UGC and its educational programmes are gaining popularity.

- The University has established the following 2 Departments and 3 Centres during this Academic Year:-

  - o Department of Medical Physics
  - o Department of Applied Sciences and Technology.

- o Anna University – Ryerson University, Canada (AU-RU) Urban Energy Centre

- o Technology Incubation Centre

- o Anna University–Bagavan Cyber Tech (AU-BCT) Kalam Centre of Excellence for software development and training.

- The faculty members of the University have published 431 papers in National Journals and 680 papers in International Journals. The faculty members of the University have also published 68 books during this academic year.

- Ministry of Environment and Forest, Government of India sanctioned a sum of Rs.165 crore and released Rs.11.42 crore for the establishment of a Centre for Sustainable Coastal Management at Anna University.

- Department of Science and Technology (DST), Government of India has sanctioned Rs.12.44 crore for the establishment of "National

Hub for Health Care Instrumentation" at Anna University and released Rs.4.00 crore.

ACTIVITIES FOR 2013-14

4.13.3 The University proposes to implement the following schemes:

- A Post Graduate Research Centre with High Tech Laboratory in the Department of Electronics and Communication Engineering with financial support of Rs.2.5 crore is being established from University funds.

- In a novel approach, Media Centre with the support of Ministry of Human Resource of Development will engage Direct-To-Home facility to telecast lectures and exercises on subjects and soft skills to students and faculty, especially after college hours.

- Recently, Ministry of Human Resource of Development has short-listed Anna University as

Centre of Excellence for its Biomedical Applications. Similar approaches and programmes will be emphasized for constituent and affiliated colleges.

- Based on the Tamil Nadu Solar Energy Policy 2012, the University has initiated action to install Solar Electric Power Generation Systems in various campuses.

- A High Power Committee for ensuring Empowerment of Women on the lines of recommendations made by the **Hon'ble Chief Minister** has been constituted and mandatory guidelines and directions have been framed to be implemented in all the affiliated colleges of Anna University.

5. TAMIL NADU ARCHIVES

5.1   The Old Madras Record Office started in 1909 was rechristened as Tamil Nadu Archives and Historical Research in 1973. The Head Quarters is situated at Egmore, Chennai. There are six District Record Centres at Cuddalore, Coimbatore, Salem, Thanjavur, Madurai and Tiruchirapalli. Tamil Nadu Archives as the custodian of Public Records plays an indispensable role in the day-to-day administration   of the Government of Tamil Nadu. The Tamil Nadu Archives also publishes District Gazetteers for various districts. The Tamil Nadu Archives has celebrated its centenary.

5.2   Tamil Nadu Archives houses about 65 lakh records of the Secretariat and the erstwhile Board of Revenue. While most of the records are in English and Tamil, some are in French, Dutch, Danish and Persian. The oldest record dates back to 1657. Many authors, historians and researchers from Universities and Colleges, both Indian and foreign, visit Tamil Nadu Archives for their research. The Tamil Nadu Archives

Library housing rare books is also a rich treasure trove to the scholars.

5.3 Rs.40 lakh was sanctioned under Part II Scheme 2012-13 and the entire amount was spent for the following works and purchase of specific items:-

- To preserve the records by digitization through scanning and microfilming.

- Steel Racks for Library and Gazetteer Section.

- Digital Scanning and Microfilming of Government orders from 1900 onwards.

- Digitization of Indices from 1900 onwards.

- Drying racks and pedestal fans for Tamil Nadu Archives and 6 District Record Centres.

- Computers and peripherals.

- Vacuum cleaner.

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- Pressing Machine.

- Water purifiers.

5.4　During 2013-14, Rs.10 lakh has been provided under Part II scheme for purchase of storage cabinets for Microfilm Unit.

6. TAMIL NADU STATE COUNCIL FOR HIGHER EDUCATION

6.1 The Tamil Nadu State Council for Higher Education (TANSCHE) was established in 1992 for the promotion and coordination of Higher Education policies and programmes among Central, State Governments and University Grants Commission. The Council will determine standards in institutions of Higher Education in accordance with the guidelines issued by University Grants Commission.

6.2 **ACTIVITIES / SCHEMES UNDERTAKEN DURING THE YEAR 2012-13**

- The Hon'ble Chief Minister's pioneering 'Study Abroad Programme' for academically bright but economically deprived post–graduate students studying in Government Arts and Science Colleges, to study one semester overseas, is being carried out through Tamil Nadu State Council for Higher Education. In the first phase, a Memorandum of

Understanding was signed between TANSCHE and British Council in the presence of the **Hon'ble Chief Minister** of Tamil Nadu to send 25 students to study their third semester and five teachers to study special courses in select universities in the United Kingdom.

25 students and five faculty members have been selected through a rigorous process based on criteria, specially framed by an expert selection committee. Edge Hill University, Birmingham University, Nottingham University and two Colleges – Royal Halloway College and King's College affiliated to London University have been selected for this purpose. Students and faculty members will study in United Kingdom between September 2013 and January 2014.

The entire expenditure for the Study Abroad Scheme is borne by the State Government @ Rs.15 lakhs per student / faculty candidate.

- The nodal centre for "University - Business Collaboration" in Tamilnadu

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State Council for Higher Education is in the process of forming the Task Force and formulating guidelines for coordinating the Industries, Corporate Sector and Universities for research interfacing and Intellectual Property (IP) issues.

- The scheme of "Creation of Soft Skill Centres", has commenced with the identification of 30 Government Arts and Science colleges, one in the each district. Tamil Nadu State Council for Higher Education in collaboration with INTEL will train and develop 15 teachers from each centre as Resource Persons to support students in each of these centres. The initiative will help to create a strong pool of 450 Resource Persons and they will provide all necessary support to the students in sustaining these 30 soft skill centres across the State. INTEL will also orient all students from these 30 colleges on soft skills with customized software to enable them to compete for job opportunities in Information Technology (IT) and Human Resource Development (HRD) sectors.

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- The scheme of "Special care for slow learners in order to prevent College dropouts" is to be implemented in 17 Government and 07 University Constituent Arts and Science Colleges, started before 2010-11 and without 2(f) & 12 (B) status.

  Under this scheme, each college will be funded with Rs.1,25,000/- every year to conduct special coaching classes for 3rd year students.

- Tamilnadu State Council for Higher Education successfully conducted a 3 day induction training programme for Grade I and Grade II Principals of Government Arts and Science colleges, with the focus on administrative, academic, financial responsibilities and Human Relations Management. A total of 53 Principals attended the training programme.

- 28 'Minor Research Project' proposals (20 Science, 8 Humanities) submitted by the teachers of Government Arts and Science colleges were selected for funding with a sum of Rs.1 Lakh each.

- 38 'Student Mini Project' proposals (Science-24 Humanities-14) submitted by the Post Graduate students of Government Arts and Science Colleges were selected for funding with a sum of Rs.15,000/- each.

- The "Academic Affairs Centre" conducted meetings of Vice Chancellors, Controllers of Examinations, Directors of Curriculum Development Cells, Chairpersons of Boards of Studies of various subjects, Directors of Academic Staff Colleges, and experts in English teaching, to revise the 'Choice Based Credit System' with transfer of credits, to bring reforms in examination system and to frame guidelines for curriculum development.

6.3 ACTIVITIES FOR 2013-14

- Three "Best College Awards" each carrying a citation and cash award are instituted one each for Government, Government aided and Self-financing Colleges.

- To provide compatibility in subjects offered by various universities in Tamil

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Nadu and to facilitate the mobility of faculty and students from one university to another, TANSCHE will form the following *'State Integrated Boards of Studies'*, comprising experts from each university in the areas of knowledge concerned

- — Biological and Bio-technological Science
- — Mathematical Sciences
- — Physical Science and Chemical Science
- — Computer Science and Information Technology
- — Managerial and Business Sciences
- — Social Science
- — Humanities
- — Languages

- To establish an "International Relations Centre" at Tamil Nadu State Council for Higher Education to create avenues and to propel educational institutions in Tamil Nadu to participate in Global Higher Education. The centre would assist in establishing linkages between colleges/ universities in Tamil Nadu and International

Institutions, in the areas of teaching, research, internship, capacity building and extension services. The centre will identify and pool information about scholarships/ fellowships and opportunities available in international institutions, in the interest of students and teachers of colleges/universities in Tamil Nadu. It will also facilitate the process of acquiring the scholarships/ fellowships and organize orientation/ training and capacity building programmes for successful candidates.

7. TAMIL NADU STATE COUNCIL FOR TECHNICAL EDUCATION

7.1 Tamil Nadu State Council for Technical Education was established in the year 2010 for coordination and determination of Standards in Colleges and Scientific Research in Technical Education.

7.2 **ACTIVITIES UNDERTAKEN DURING 2012-13**

- Suggestions and views have been submitted by this Council to Government in respect of the finalization of Tamil Nadu Bio–Technology Policy 2012.

- A revised Perspective plan for Improvement of Quality of Technical Education in the State was prepared under various Heads.

7.3 ACTIVITIES FOR 2013-14

- To create and maintain a Database containing important information such as courses offered, students strength, pass percentage etc.

- To promote Institutes of Excellence outside the Technical University system, in frontier areas of knowledge.

8. SCIENCE CITY

8.1 The unique agglomeration of 60 educational and research institutions such as Anna University, Indian Institute of Technology (IIT), Central Leather Research Institute (CLRI) and Tamil Nadu Science and Technology Centre etc. belonging both to Central and State Governments in the Guindy - Tharamani area has been declared as Science City. The vision of Science City is popularisation and propagation of Science and Technology among the masses.

8.2 Workshops in emerging areas of Science and Technology such as, Biotechnology, Information and Communication Technology, Tissue Culture, Virology, Nanotechnology and Nuclear Technology were organized, benefitting 475 Post Graduate students.

8.3 Training was imparted in significant areas of Science such as Global warming, Disaster Mitigation, Astronomy, Biodiversity and Advanced Instrumentation to school and college teachers at a cost of Rs.3.00 Lakhs. 500

teachers both at the school and college level participated and benefitted.

NANO REVELATION 2012

8.4 The 'Nano Revelation 2012' is a series of 11 seminars, being organised every month on select areas of Nanoscience and Nanotechnology, in association with the National Centre for Nanoscience and Nanotechnology, University of Madras.

8.5 The seminar series was inaugurated on the National Science Day comprising 11 themes of which 7 have already been completed. Scientists/ Academicians from across the country are being invited to address the students.

SAFE LABORATORY PRACTICES

8.6 An awareness programme on safe laboratory practices was organized in association with the Department of Analytical Chemistry, University of Madras and the Sri Ramachandra University for the benefit of school and college students.

CHENNAI SCIENCE FESTIVAL 2013

8.7 The Chennai Science Festival consists of a wide range of activities relating to Science and Technology such as mega science exhibition, popular lectures, panel discussions, science based competitions for school and college students. The 6th Chennai Science Festival was organized from 30th January to 3rd February, 2013 at the Anna Gem Science Park School, on the theme "Biodiversity and Food Security". There were 150 exhibit stalls on themes such as Energy, Health, Veterinary Sciences and Basic Sciences. Nearly 42,000 people visited and appreciated.

8.8 ACTIVITIES FOR 2013–14

- It has been proposed to introduce the "Innovation in Science Award", which is the first of its kind in the State. The award carries a cash prize and a citation that would be bestowed on a outstanding innovation that would benefit the society.

- Science City in association with the King Institute of Preventive Medicine and Research would be organizing hands-on workshop on laboratory techniques.

- It has been proposed to install Photovoltaic Solar Panel to harness solar energy.

- An innovative scheme for production of electricity/ power from Wind Energy and Hydro Power.

9. TAMIL NADU SCIENCE AND TECHNOLOGY CENTRE

9.1 Tamilnadu Science and Technology Centre was established in the year 1983. The main idea is to create scientific temper and arouse curiosity thus paving the way to attract younger generation to the Science and Technology Sector. To cater to the needs of other parts of Tamilnadu, Anna Science Centre at Tiruchirappalli and District Science Centre at Vellore have been established.

9.2 The Science and Technology Centre organizes and conducts Temporary Exhibitions, Short-Term Courses in Astronomy, Computer Workshops, Seminars and Lectures on Science, Summer Science Camps, Winter Science Camps, Astronomy Camps, Math Talent Contests, Astronomy Talent Contests and Programmes such as "Meet the Scientist", "Meet Your Medical Expert", etc., for the benefit of the student community.

9.3 ACTIVITIES

- Regional Science Centre with facilities of four galleries, namely, "How Things Work Gallery", "Textile Gallery", "Physical Sciences Gallery" and "Fun Science Gallery" along with 3D Theatre and a Science Park have been established at a cost of Rs.8.5 crore in Coimbatore. This Regional Science Centre will soon be opened for the public.

- A Dinosaur Park in Chennai has been established and opened to the public.

- There are exhibits on various scientific principles, in the Science Park to enable children enjoy learning the concepts of Science and Technology effortlessly. Also 3D Science Theatre, Evolution Park (Dinosaur Park) and Birla Planetarium have been provided in Periyar Science and Technology Centre, Chennai.

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- To make the public aware of technological developments in Defence Forces in India, a "Gallery on Defence Research and Development" is being established at an estimated cost of Rs.1 crore with assistance from Defence Research and Development Organisation of Government of India, in Periyar Science and Technology Centre.

- With a view to eradicate the phobia prevailing among the student community about Mathematics, "Ramanujan Gallery covering the details of Learning Mathematics through fun, usage of Mathematics in day–to-day life, Mathematics in Industries" is being established at an estimated cost of Rs.40 lakhs in Periyar Science and Technology Centre, Chennai. This gallery will be inaugurated shortly.

- To create and enhance interest in learning Mathematics among the student community in rural areas, a Mobile Maths Bus at an estimated

cost of Rs.25 lakhs is being launched.

- To make the public aware of the need to explore the possibility of harnessing the non-conventional sources of energy, a Non-Conventional Energy Park has been established at an estimated cost of Rs.1.4 Crore at Periyar Science and Technology Centre, Chennai.

- To dispel the misconceptions about nuclear power, a "Hall of Nuclear Power" depicting the constructive uses of Nuclear Power for the society, under 21 titles, is being established at Periyar Science and Technology Centre, Chennai with financial assistance of Rs.2.4 Crore from Nuclear Power Corporation of India Limited.

- To create awareness among the public and students about the developments in Research in Space, Launching of Rockets and to provide information on Planets and Stars, a "Space Science Gallery" is being established with financial

assistance of Rs.25 lakhs each from the Government of Tamilnadu and Indian Space Research Organization (ISRO).

9.4 ACTIVITIES FOR 2013-14

- The Planetarium at Chennai is to be upgraded as Digital Planetarium with State–of-Art technology at a cost of Rs.10 crore.

- Modernization of 3D Theatre at Periyar Science and Technology Centre.

- To popularize Science and Technology concepts, a 3D Theatre will be established at District Science Centre, Vellore.

10. TAMILNADU STATE COUNCIL FOR SCIENCE AND TECHNOLOGY

10.1 Tamilnadu State Council for Science and Technology was formed in 1984, as an   autonomous apex body to initiate and support research and development in different scientific disciplines. The Council has been implementing various Science and Technology schemes to fulfill the developmental needs of our State.

ACHIEVEMENTS

10.2 The Tamil Nadu State Council for Science and Technology has been implementing various Science and Technology schemes through Higher Educational and Research Institutions of our State utilizing the scientific human resource and infrastructure already available with them. The scheme of the Council has enabled significant research and development in these institutions through Science and Technology projects, Student Projects, Research Funding for Research Scholars in Colleges, Tamilnadu

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Scientist Award etc. Development of scientific human resource was enabled through schemes like Young Scientist Fellowship, Travel Grant to Young Scientist and Financial Assistance for Seminar / Symposium / Workshop. These schemes have been taken to a large number of beneficiaries by significant improvement in the budget, from Rs.1.5 crore in 2010-11 to Rs.1.8 crore in 2011-12 and Rs.2.3 crore in 2012-13.

ACTIVITIES

SCIENCE AND TECHNOLOGY PROJECTS

10.3 Research, relevant and useful to our State in sectors such as Agriculture, Environmental Sciences, Physical Sciences, Biological Sciences, Veterinary Sciences, Medical Sciences, Social Sciences and Engineering and Technology are undertaken through higher educational institutions. 15 projects were supported with a grant of Rs.35.00 lakhs for 2012-13. 18 projects will be supported with a budget of Rs.50.00 lakhs for 2013-14.

STUDENT RESEARCH SCHEME

10.4 Final year students of UG/PG courses in Engineering/ Medicine/ Agriculture/ Veterinary Sciences and P.G. Students of Sciences are provided with a maximum assistance of Rs.10,000/- per project for carrying out socially relevant projects under their curriculum so that student talent in our State is utilized for the development of Science and Technology. 275 projects will be supported with a budget of Rs.25.00 lakhs for 2013-14.

PARTIAL ASSISTANCE FOR SEMINAR/ SYMPOSIUM /WORK SHOP

10.5 To foster exchange of scientific knowledge and also facilitate interaction between stake holders in research such as researchers, teachers, scientists, industrialists, research scholars and others, partial financial assistance is provided to the organisations within the State of Tamilnadu, to organize seminars/ symposia/ workshops in Science and Technology. 50 programmes were supported with a grant of Rs.10.00

lakhs in 2012-13. 70 programmes will be supported with a budget of Rs.15.00 lakhs for 2013-14.

TRAVEL GRANT FOR YOUNG SCIENTISTS

10.6 Young scientists and researchers below 40 years of age and working in organisations (University/ College/ Research Centre) located within the State of Tamilnadu are provided with 50% air fare in case of international conferences and 100% train fare in case of national conferences to participate in such scientific conferences and present their research findings.   13 scientists have been sanctioned a grant of Rs.3.00 lakhs for 2012-13. Another 13 scientists will be sanctioned Rs. 3.00 Lakhs in 2013-14.

YOUNG SCIENTISTS FELLOWSHIP SCHEME

10.7 To encourage young scientists and researchers below 35 years of age to acquaint themselves with latest techniques in science research and development, a fellowship for a period of

2 to 6 months is provided. Selected Scientists can undergo training/learn sophisticated instrumentation techniques or modern research methodologies or do collaborative research work with senior scientists in any of the Research Centres/ Universities within India. 12 scientists have been supported with a grant of Rs.3.00 lakhs for 2012-13. 15 scientists will be supported with a budget of Rs.4.00 lakhs for 2013-14.

TAMILNADU SCIENTISTS AWARD (TANSA)

10.8 To encourage and honour scientists and researchers who have made significant contribution in their fields of specialization through their skill/pioneering or outstanding applied research work and any other activities leading to Science and Technology development in the State, Tamilnadu Scientists Award is presented. Each selected scientist is awarded with a cash of Rs.25000/- and a citation. Awards are given in different disciplines such as Agricultural Sciences, Biological, Chemical Sciences, Engineering and Technology, Environmental Sciences, Medical,

Mathematical, Physical, Social and Veterinary Sciences. Tamilnadu Scientists Award was presented to 10 scientists with a grant of Rs.3.50 lakhs for 2012-13. TANSA will be awarded to 10 scientists with a budget of Rs.4.00 lakhs for 2013-14.

POPULARISATION OF SCIENCE AND TECHNOLOGY

10.9 To popularize Science and Technology among school children, farmers and public, financial support is provided to Universities, Colleges and Voluntary Organisations in our State to conduct Science Exhibitions, Teacher Training Programmes and Popular Lectures on various aspects of Science and Technology. 60 organisations were supported with a grant of Rs.10.50 lakhs for 2012-13 benefitting 3 lakhs people. During 2013-14, about 72 organisations will be supported with a budget of Rs.12.00 lakhs benefitting 3.25 lakhs of people.

YOUNG STUDENT SCIENTIST PROGRAMME

10.10 To expose talented young students of IX std., to science and technology so that they take up science and research as their career in future, students from various districts are given this exposure in a reputed college/ university with facilities and resource persons for twenty days in the month of May. 800 students from 20 districts have been trained at a cost of Rs.30 lakhs for 2012-13. 1200 students from 30 districts will be trained at a cost of Rs.45 lakhs for 2013-14.

ASSISTANCE FOR SCIENCE AND TECHNOLOGY PUBLICATIONS

10.11 To bring out scientific publications in Tamil to benefit children, researchers and general public, financial assistance is provided to organizations publishing such magazines/books. In the year 2012-13, this scheme has been implemented with an allocation of Rs.40,000/- to benefit 10,500 students. In the year 2013-14, this scheme will be

implemented with an allocation of Rs.75,000/- to benefit 12000 students.

DISSEMINATION OF INNOVATIVE TECHNOLOGY

10.12 Large number of research projects are carried out in our State, leading to technological and scientific activities. Therefore, innovations with potential for field applications need to be disseminated by educationists and scientists through training programmes and workshops. During 2012-13, 17 programmes were conducted benefitting about 450 individuals with a grant of Rs.9 lakhs. During 2013-14, 20 programmes will be conducted benefitting about 500 individuals with a grant of Rs.10 lakhs.

QUALITY IMPROVEMENT OF SCIENCE EDUCATION IN RURAL SCHOOLS

10.13 To improve the quality of science education, particularly for the benefit of rural school children, In-Service training programme for the Science Teachers of VI, VII and VIII standards are conducted in well established Arts and Science Colleges for

a period of five days. In 2012-13, 10 programmes were conducted in 10 districts with an allocation of Rs.10 lakhs. During 2013-14, 12 programmes will be conducted in 12 districts with an allocation of Rs.12 lakhs.

CREATION OF SCIENTIFIC AWARENESS

10.14 To create Scientific Awareness among the rural school students, farmers and self help groups, awareness programmes are organized through colleges, universities and research Institutions. In 2012-13, this programme has been conducted in 10 districts at a cost of Rs.6.50 lakhs. This programme will be conducted in 12 districts at a cost of Rs.8 lakhs during 2013-14.

SCIENCE AND TECHNOLOGY CAPACITY BUILDING FOR INDUSTRIAL NEEDS

10.15 To enable graduates to acquire skill sets relevant to industries and motivate them to opt for self-employment, this programme acts as a bridge course reinforcing Institute-

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Industry interaction. It is organized with the active collaboration of industries and colleges (Polytechnics included). In 2012-13, it was organized in 10 districts with a grant of Rs.14 lakhs benefiting 3500 students. During 2013-14, this programme will be organized with a budget of Rs.15 lakhs benefitting 4000 students in 12 districts.

APPLICATION OF SCIENCE AND TECHNOLOGY IN RURAL AREAS

10.16 To apply science and technology to uplift the socio-economic and educational status of the people at panchayat level in districts of Tamilnadu, this Scheme envisages the transfer of science and technology techniques and findings to rural areas. In 2012-13, this programme has been implemented in 10 districts at a cost of Rs.14.00 lakhs to benefit 5000 farmers, artisans and rural people. During 2013-14, this programme will be implemented in 12 districts at a cost of Rs.15.00 lakhs to benefit 5500 farmers, artisans and rural people.

PROGRAMME FOR BRIDGING THE GAP IN RESEARCH FUNDING FOR RESEARCH SCHOLARS IN COLLEGES

10.17 Research funding is not available to research scholars in many of the Colleges. If the gap in research funding is addressed, it will pave the way for many innovative ideas to be tested and it would yield not only research data but also improve and develop the scientific manpower. Particularly, colleges and institutions set up in rural areas are disadvantaged when compared to universities which are able to attract funding through various schemes of central funding agencies. Therefore, research proposals are invited from research scholars through colleges of our state and after evaluation by experts, suitable projects are funded suitably. In 2012-13, this scheme was implemented with a budget of Rs.15 lakhs. This scheme will be continued in 2013-14 with a budget of Rs.24 lakhs due to overwhelming response.

11. TAMIL NADU STATE URDU ACADEMY

11.1 The Tamil Nadu State Urdu Academy was inaugurated on 21.07.2000. Hon'ble Minister for Higher Education is the Chairman of the Academy.

11.2 **Works**

- The Academy co-sponsors All India Mushairas conducted by National Chamber of Commerce.

- The Academy gave "Dr Abdul Huq Award" for Literary Excellence to six poets with a cash award of Rs.25000/- each at a public function and also gave merit awards and cash prizes to State rank holders in Urdu language.

- In Tamil Nadu, Urdu Language Courses are offered in 20 Colleges and Arabic language courses are offered in 5 Colleges.

11.3 ACTIVITIES FOR 2013-14

- To grant cash prizes and scholarships to meritorious Urdu students.

- To grant financial assistance to Urdu coaching centres.

- To conduct a local Mushaira to encourage poets who nurture the Urdu language.

P. Palaniappan
Minister for Higher Education