

#### VIEW POINTS OF TAMILNADU STATE ON THE ROAD MAP FOR ENSURING QUALITY OF HIGHER AND TECHNICAL EDUCATION USING ACCREDITATION AS A TOOL

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### **ACCREDITATION**

#### Criteria Under NAAC

- CRITIGS
- C- Curriculum
- R- Research, Consultancy & Extension
- I- Infrastructure & Learning Resources
- T- Teaching, Learning
   &Evaluation
- I- Innovative Practices
- G- Governance, Leadership
   & Management
- S- Student Suggestion &

#### Criteria Under NBA

- CPEMFS
- C-Continuous improvement
- P-Program outcome
- E-Educational objectives
- M-Mission & Vision
- M-Mapping of course objective with program outcome
- F-Faculty
- F-Facilities
- S-Student learning outcome

### HUMAN DEVELOPMENT INDEX

- The Human Development Index (HDI) is a composite statistics of life expectancy, education and income indices to rank countries into four tiers of human development.
- The HDI of India is 0.619, while the corresponding figure for TamilNadu is 0.736 placing it among the top states in the country.

(Source: Policy note: 2012-13, Higher Education Government of TN)

### GROSS ENROLMENT RATIO (GER)

- The Gross Enrollment Ratio (GER) is a statistical measure used in the education sector to determine the number of students enrolled in school at different grade levels (like elementary, middle and high school) and examine it to analyze the ratio of the number of students who live in that country to those who qualify for the particular grade level.
- The GER at national level is 13% and for Tamil Nadu it is higher at 18%.
- The aim of TN Govt. is to make it as 21% by 2017 and 25% by 2025. (Source: Policy note: 2012-13, Higher Education Government of TN)
- These objectives are achieved through: Concrete Road map through VISION 2023, 12<sup>th</sup> FIVE YEAR PLAN, POLICIES and ANNOUCEMENTS

### TN GOVT. VISION – 2023 (Edn.)

- The vision of Tamil Nadu for 2023 is to become India's most prosperous and progressive state with no poverty and where its people enjoy all the basic services of a modern society and live in harmonious engagement with the environment and with the rest of the world
- Tamil Nadu will be known as the innovation hub and knowledge capital of India, on the strength of world class institutions in various fields and the best human talent
- Tamil Nadu will be India's leading state in social development and will have the highest Human Development Index (HDI) amongst all Indian states
- Tamil Nadu will provide the best infrastructure services in India in terms of universal access to education

### Making Tamil Nadu the knowledge capital and innovation hub

The key enablers that facilitate innovation and knowledge creation are:

- The establishment of a dynamic information infrastructure that increases the access to information universally and makes decision making faster, transparent and efficient
- Ensuring skilled workforce
- Creation of an ecosystem of knowledge including the physical availability of research organizations, universities, think tanks and business organizations whose success depends on how information is converted to knowledge

## Making Tamil Nadu the knowledge capital and innovation hub

- Establish and strengthen ten or more centres of excellence in Tamil Nadu - these would essentially be world class organizations that are at the cutting edge in their respective domains.
- An economic and institutional regime that encourages creation of new knowledge and entrepreneurship to use that knowledge
- An environment conducive for protecting Intellectual
   Property Rights and celebrating success in innovations, thus
   fostering a risk taking culture.
- Setting up an innovation fund that rewards innovation by students, businesses, academic institutions and others

## Different areas of focus for Centres of Excellence

- Automotive Technology
  - Solar and clean technology
  - Bio technology
  - Agricultural practices
  - Water conservation

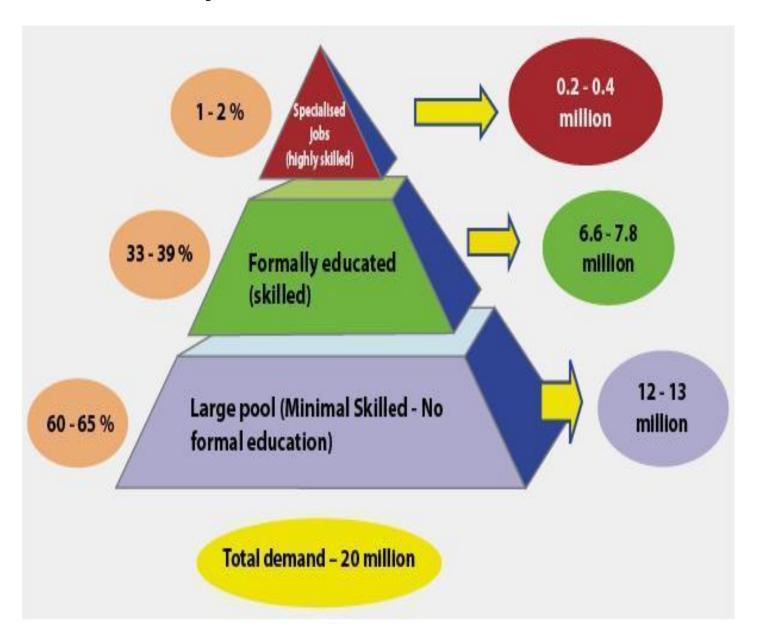
- Construction management
- Life style diseases
- Aero spaceTechnology
- Basic sciences
- Nano-technology

### TN GOVT. VISION – 2023, contd/-

### Thrust on skill development:

- Vision2023 envisages training and skilling 20 million persons over the next 11 years. This will include 15 million people entering the job market and 5 million who are already part of the working population
- 65% of the persons targeted for skill development (these persons would have studied until secondary school) would be provided with training for basic skills for a variety of livelihoods, about 33% would be persons who have undergone formal education as part of vocational training programmes or in colleges, while the top 2% would be top echelon professionals.

### Skills Pyramid for Tamil Nadu



### Twelfth 5-Year Plan Objectives (Technical and Professional Education)

- Improving physical infrastructure
- Strengthening quality of education
- Strengthening training and quality of faculty
- Promoting research orientation
- Strengthening finance of higher education institutions.
- Improving ICT infrastructure
- Bringing governance reforms

### **Improving Physical Infrastructure**

- Upgrading laboratories in partnership with Centres of Excellence like IITs & NITs
- Upgrading Polytechnic Colleges by collaborating with leading industries.
- Networking of libraries.
- Acquiring additional lands.
- Adopting Green Campus concepts
- Establishing high skill training centre (NDT, CNC, VLSI, PLC/LCS)

### Strengthening ICT facility

- Adopting e-governance across all services of DTE (Admission, examination, teaching, placement and training, budget allocation)
- Providing minimum 10 MBps connectivity to all colleges
- Wi-fi connectivity for teachers/students.
- Video conferencing facility
- Smart class rooms with internet, interactive white board LCD projector, Web camera.

### Improving Training and quality of Faculty

- Recruiting qualified faculty through open selection (written test / interview / research aptitude / teaching skill)
- Faculty monitoring committee under DTE to check mal practices
- Providing challenging academic am
- Encouraging conference participation.
- Setting up of Faculty training college for every four zones (orientation in pedagogy)
- Conducting academic audit.

#### Student related activities

Special counselling for slow learners.

Training for entrepreneurship/employability

Establishing languages labs

First generation graduate concession

#### **Administrative and Governance Reforms**

- Obtain autonomous status for remaining Engineering colleges.
- Accreditation for UG/PG courses by NBA
- Actively promote 3 tier system (UG/PG/Ph.D.)
- Special academic counseling for below par colleges
- Special recognition/awards for high performing colleges

### **Promoting Research**

- Upgrade existing R&D facilities
- Entering MoU with R&D organization/Foreign Universities
- Special drive for Ph.D. registration
- Identifying thirst areas and enhancing research capabilities (Nanotech, Biotech, Bio-medical, Bio-information, Robotics, Medical-Electronics, IT etc.)
- Establishing Centres of Excellence
- Promoting meaningful industry-academic collaboration

## TN GOVERNMENT ANNOUNCEMENTS 2012-13

- Establishment of University Business Collaboration Centres
- Study Abroad Programme for Faculty and Students.
- University Centres for Technical and Academic writing
- Incubation and Technology Transfer Centres
- University Centres for multimodal material production for the differently abled
- Establishment of PG Centres of Excellence with High-Tech Laboratories in Universities
- Networking of libraries

# TN GOVERNMENT ANNOUNCEMENTS 2012-13 (Cont...)

- Special care for slow learners to prevent college dropouts
- Creation of Soft Skills Centres for empowering students to develop managerial skills and to gain employability
- Establishment of Government Community Colleges in 32 districts of Tamil Nadu under Tamil Nadu Open University
- Establishment of Zonal Centres by Tamil Nadu Open University
- Establishment of PG Extension Centres in universities
- Opening of Additional Courses in Government Arts & Science Colleges

## TN GOVERNMENT ANNOUNCEMENTS 2013-14

- Establishment of Information and Communication Technology (ICT) Training Centres for Differently abled and ICT enabled Self Employment Training Centres for Women in Bharathidasan University
- Setting up of a Centre for Tourism and Hotel Management in Madurai Kamaraj University
- Transforming the Madurai Kamaraj University Campus as Green Campus
- Centre for Tamil Computing in Periyar University
- Centre for New and Renewable Energy Studies in Periyar University, Salem

# TN GOVERNMENT ANNOUNCEMENTS 2013-14 (Cont...)

- Establishment of three Zonal Centres at Chennai, Madurai and Dharmapuri by Tamil Nadu Open University
- Introduction of New Courses in Government Arts and Science Colleges
- Recruitment of Assistant Professors in Government Arts and Science Colleges and Colleges of Education
- Recruitment of Assistant Professors in Government Engineering and polytechnic Colleges
- Community Development through Polytechnic Colleges

### Twelfth Plan Outlay-Technical and Professional Education (2012 – 17)

#### A Ongoing Schemes (Rs. in Crores)

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1.	Construction of class rooms, Laboratories Tutorial rooms, Seminar hall, Department Office, Faculty room, Boys/girls Common room, Staff Quarters and Hostels, Auditorium, Placement Cell Building for Engineering Colleges / Polytechnic Colleges.	398.31
2.	Construction of Auditorium in Engineering and Polytechnic Colleges.	124.00
3.	Establishing Smart Class rooms & Digital Library, Centre of Excellence for Applied Energy Research and Training, Nano Technology & Central Placement and Training Institute for Educated Rural Youth – skill training to educated rural youth Empowering them for getting Better Employment with increased incomes.	56.02
4.	Construction of Placement Cell Building in Engineering Colleges.	3.12
5.	Modernization and capacity expansion of Fisheries Technology Course.	4.00
6.	Preparation of e-Lessons by DOTE, Chennai.	1.15
7.	Technical Education Quality Improvement Programme - Phase II.	86.55
	Total Ongoing Schemes	673.15

### Twelfth Plan Outlay-Technical and Professional Education (2012 – 17)

#### **B** New Schemes (Rs. In Crores)

<ol> <li>3.</li> </ol>	Special Care Category Colleges and Honour of Special Colleges.  Prevention of College dropouts and Suicide Tendency (Counselling Centre).	5.20 10.00
4.	Academic and Social Audit	5.00
5.	Establishment of 12 Universities, new Universities with Partnership from Universities Abroad and community colleges.	1178.20
	Total New Schemes	1357.25
	Total	2030.40

#### Twelfth Plan Outlay-Higher Education (2012 – 17)

•	A Collegiate Education
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**Total Ongoing Schemes** 

I	Ongoing Schemes (Rs. In Crores)	
1	Free Education for girls belonging to poor and middle class families studying in B.A., B.Sc., and B.Com., Courses.	0.30
2	Opening of Degree Courses in Government Colleges (Men and Women) and and Development schemes.	0.43
3	Opening of Computer centre for the visually impaired students in Government Colleges (Men and Women).	0.05
4.	Financial Assistance for the conduct of Special Coaching Classes to SC/ST/MBC in Government Colleges.	0.10
5.	National Service Scheme (NSS) in Government Colleges and Universities.	36.29
6.	Purchase of Computer and Accessories, Machineries in 6 Regional offices.	0.15
7.	Purchase of Computer and Accessories in the Government Arts & Science Colleges.	3.00

40.32

### Twelfth Plan Outlay-Higher Education (2012 – 17)

#### II New Schemes (Rs. In Crores)

1.	Building Infrastructure Development	214.00
2.	E-governance, implementation e-Learning and academic Audit for colleges.	98.20
3.	Upgradation of Infrastructural Facilities.	14.90
4.	Free Distribution of Laptop Computers to the Arts & Science, Engineering and Polytechnic College students.	1580.84
5.	Strengthening of existing Arts and Science Colleges, Basic Sciences Awards and fellowships for UG, PG, SC / ST and women.	485.00
6.	Establishment of Regional Rural Universities (Skill Development Centres) and Community Colleges in 6 zones.	280.00
7.	Establishment Regional Hi-Tech Laboratories and setting up Entrepreneurship Development Cells (EDC) in all Colleges	259.00
8.	Establishment of State Innovation Centre and Self-Sustainable Campus.	100.00
9.	Accessibility of higher education to all and other Important Schemes etc.	284.95
	Total New Schemes	3316.89
	Total (I+II)-A	3357.21

# TAMILNADU GOVT. POLICY NOTE:2013-14

- Establishment of IIIT for 2013-14 at Srirangam to cater to skilled human resource requirement in IT field (R64 Cr from GOI, Rs 44.8 Cr for TN Govt., Rs 19.20 Cr from industries)
- Establishment of 2 Engg. Colleges (Dharmapuri & Thanjaur Dts) at a cost of Rs 89-90 Cr.
- Establishment of 10 Govt. Polytechnic Colleges
- Free Text books for students from weaker section (12,065 students Rs. 14,25,000)
- Engineering admission through single window counseling. (To enable the economically weaker and meritorious Students to join Engg. Professional Courses at an affordable cost. Around 1,27,404 students took engg. seats during 2012-13.

# TAMILNADU GOVT. POLICY NOTE:2013-14, contd/-

First generation graduation concession.

To take the technical education to the door steps of students from marginalized families, tuition fee exemption is given.

(Rs. 478.7 Cr was disbursed for 2,48,064 students in 2012-13)

# TAMILNADU GOVT. POLICY NOTE:2013-14, contd/-

- Waiver of tuition fees and issue of free bus pass to the polytechnic college students.
- Training Programmes for Polytechnic Teachers

The process of continuous improvement of teaching skills to teachers 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.

Technical Education Quality Improvement Programme (TEQIP) - Phase –II
 Government Engineering Colleges at Coimbatore, Salem, Karaikudi and
 Bargur and Computer Science department of Manonmanium Sundaranar
 University, Trirunelveli have been selected under this scheme.

As a first installment, a sum of Rs. 10.08 cr were released to these institutions in May, 2012.

# TAMILNADU GOVT. POLICY NOTE:2013-14, contd/-

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

Appointment of Faculty in Govt. Engineering and Polytechnic Colleges

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

#### **ANNA UNIVERSITY**

## The largest Technical University of the State & Major Partner in Vision 2023 implementation

- Premier Technical University established in 1978
- 4 constituent colleges, 14 University colleges and 540 affiliated colleges
- Eligible programs are accredited by NBA
- Awarded 5-Star status by NAAC
- Applied for Reaccreditation of NAAC
- More than 400 faculty members with Ph.D. qualification
- 34 University departments, 28 U.G. & 84 P.G. Programs
- 30 Centres of Excellence

# ANNA UNIVERSITY – Teaching Learning & Evaluation

- Highly qualified faculty members
- Smart class rooms / Modernized Labs
- Diverse and Unique Programs
- Periodic syllabus revision
- 30% industry members in Board of Study
- Curriculum competitive to enhance employability
- ICT enables ARMS
- Student feedback mechanism
- Efficient staff student ratio(1:16)
- e-journals/ e-learning resources
- EDUSAT based learning
- Academic auditing

### ANNA UNIVERSITY - Infrastructure

- Smart classrooms(80)
- Wi-fi enabled campus
- Residential complexes
- International hostels
- Well-equipped labs
- Centres of Excellence
- R.O plants
- Waste water treatment plant
- Computing Centre
- CAD-CAM Centre
- Women Empowerment Centre
- Technology Business Incubator

- Health Centre
- Sports Board
- Networked Library
- Faculty Development Centre
- Media Centre and own FM
- Athletic tracks & courts
- Restaurants & Canteens
- Banks and Atms
- Swimming Pool
- Auditoria & Conference rooms
- Guest Houses
- Alumni Club

### ANNA UNIVERSITY - R & D

- Recognized QIP centre
- Technology Development & Transfers, Consultancy and Testing
- ANUSAT microsatellite and DHAKSHA–Unmanned aircraft
- Specialized Centres for Research in modern areas
- h- index: 59 and beneficiary of PURSE
- Over 4050 Ph.D. scholars on roll and Anna Centenary Scholarship
- Produced more than 2100 Ph.D. scholars in past 5 years
- Funding from DST-FIST, DST-PURSE, UGC, DBT, CSIR, DRDO etc.
- National Centre for Sustainable Coastal Management
- National Hub for Healthcare Instrumentation Development
- Centre with Potential for Excellence in Environmental Science

### ANNA UNIVERSITY – Student Support

- Counselor
- Class Advisor/Class Committee Chairman
- Scholarship (merit-cum-means)
- Hostels
- Internet Wi-Fi Connectivity
- Funding for Innovative Projects
- Career Guidance
- Placement and Training Cell
- Health Insurance
- Entrepreneur Development
- Research Fellowships and Study Scholarships
- Skill Development and Language Laboratories
- Student Amenities Photocopying and Printing

### ANNA UNIVERSITY - e-Governance

- Smart class room based teaching-learning
- Computerized Academic Record Management
   System
- Integrated Library Management System
- Smartcard based services to the students / staff
- Automatic enrollment in placement & Training
- E-notice board/e-tenders
- Wi-fi enabled campus (3 GBPS)
- Automated student feedback mechanism

### Thanks for your kind attention