CTARA-Vision, Activities and the Future
Convocation-Alumni Day

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www.ctara.iitb.ac.in
Welcome

Our Guest- Shri Praveen Pardeshi, IAS
- Principal Secretary, Chief Minister’s Office, GoM
- *Economics, natural history*. Illustrious career across many positions
Today’s talk

- Nuts and Bolts. Core values, courses, programs, faculty.
- Our work. This year and earlier years. What's been achieved.
- The big picture. The how and why.
- Finally...
The Broad Vision in Development Action

Core values:

- The bottom 80%-households, hamlets, gram-panchayats, villages, towns and cities
- Basic areas-soil, water, energy, livelihoods, public health
  - end-user defined or demand-driven
- Concrete stake-holder and concrete deliverable-as close to implementation as possible
  - solutions and knowledge-technology, policy, study, capacity

Methods:

- Case Study: An important theoretical/practical/development tool.
- Field-work, inter-disciplinarity, applied social science and engineering
- State programs, markets and their functioning, innovation.
- increasingly: other engineering colleges, local partners.
Core Faculty

- Anand Rao - Energy and Environment, Climate Change
- N. C. Narayanan - Water and Governance, Development
- N. Shah - Food, Agriculture and Agro-Industry
- Priya Jadhav - Electricity, Energy
- Amit Arora - Agriculture, bio-mass systems.
- Bakul Rao - Environment Analysis and Assessment
- Milind Sohoni

- Satish Agnihotri - Policy and Governance
- Santosh Jagtap - Design
- Om Damani, Puru Kulkarni, U. Bhandarkar, S. Kedare, Ganesh R., Rangan Banerjee and others
- A. W. Date - Appropriate Tech.
- Vishal Sardeshpande - Small enterprises, energy.
- Prasad Modak - Environment
# The Programs

## Objectives of the M.Tech. program

To produce the developmentalist/development professionals

- Analyse "development" situations and design solutions
- Work with implementation agencies and see them to completion
- Rising demand for such professionals - NGOs, Govt., think tanks, CSR, consultancies

## Objectives of the Ph.D. program

- Explore and innovate and push the boundary in a development sector
- Contribute to the practices, higher education and research
- Produce the next generation of leaders for national programs
The current M.Tech. in T&D

Coursework

- **Perspective**-philosophical underpinnings
  Development Theory, Appropriate Technology, Policy and Governance

- **Sectors**-the knowledge base
  Water, Soil and Agriculture, Energy, Environment

- **Skills**-to bring rigour to field work
  Field Research Methods, Quantitative Methods, Project Mgt. and Analysis

- **Field work**- 9 week structured rural stay, field visits.

- **Two-Stage Project**-Ideally
  - 1st Stage-Situation and alternatives-Appreciation
  - 2nd Stage-Technology or Policy-Generation
Locations
The Mechanisms

**TDSL for UGs**

*First-ever in the country.*

- Institute-wide platform for development projects.
- A new pedagogy—design and analysis in live situations
- A slew of interesting topics.

- MoRD and HAL fellowships
- TDSC Solutions and consultancy cell. To select and train MTD/TDSL students for private enterprise.
- UBA and UMA: MHRD and GoM programs based on CTARA experience. RuTAG: Development support to NGOs.
Research Areas

- Energy policy, implementation of various energy systems, micro-grids, energy uses in lighting and irrigation. Rural electrification.
- Biomass processing. Agri-processing, food processing and food supplements.
- Policy in environmental services and water. Regional studies and the planning process in PRI.
Sample works - Analysis

mm water use beyond rain in cultivable area
(rain*cultivable area – water use*cropped area)/cropped area
Sample works-Design-*Jal-tantra*
Rural industry
Watersheds and Simulations
Sample works-Supply Chain
Sanitation plans-Manchar and Alibag
Fishcages and Solar lamps
Sample works—Gadgets and Engineerings
What happened last year...

- **Academic ties.** Berkeley. Nanded, COEP, IIT Rourkee in TDSL.
- **Strategic.** TEQIP workshop with 17 Maharashtra colleges. Gondwana University.
- **Extension.** Swirlers, treadle pumps in Koraput, Jawhar. Priya at MERC. Lekshmi at GoM. Milind at GoM. SOUL.

**Center for Policy Studies**

- Headed by Prof. Satish Agnihotri
Behind all this... A Question.

- Basic issues of water, food, health and *living*!
- And what is to be done?
Rural Maharashtra: 2001 and 2011

- Serious, widespread and endemic. Needs more than technical solutions.
- The question of knowledge. Exhausted job definitions.
The role of the University

- The old model is inadequate—gross mis-allocation, poor practices, increasing inequality and instability.
- A new model of university as a nurturer of civil society.
- New professions—entrepreneur, innovator, advisor, consultant, evaluator, coordinator.
- Need for value-positive loops for society to migrate.
- New knowledge, new mechanisms.
Our mechanisms

- **TDSC** Solutions and consultancy cell.
  - Launching future development consultants. Payment model.
  - Parbhani, Tembha, Mokhada, **Palghar, Thane**
  - **TDSC is hiring.**

- **MoRD Fellowships**
  - Professional development research. Strategic engagement for CTARA and GoI.
  - NRLM, PMGSY, NREGA and others such as *chulhas*.

- **UBA**: MHRD program based on CTARA experience.
  - The *Technology PUSH model*.

- **RuTAG**: Development support to NGOs.
  - The technology delivery model through NGOS.
  - Fisheries, Food processing, livelihoods.
GoM

UMA
- Align research and training with development needs
- Mechanisms for colleges to perform regional role
- BATU Lonere, COEP, VJTI, Aurangabad, Nanded, SPCE
- various programs-JSA, RWS, Irrigation

MSNA
- 4 cities, poor outcomes, re-design

MSEDCL
- Agricultural feeders, 15 colleges, over 100 locations.

and many more...
In the medium term

Closer Interactions with various partners.

- Govt. of Maharashtra- Key GRs in water and engineering education.
  - Key development role in Maharashtra State.
  - Role model for other universities in India.
- UC Berkeley- long collaboration in water and policy.
- Closer collaboration with other departments.

Upcoming areas of research/courses:

- Small/Micro enterprises, rural livelihoods. Food and nutrition.
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Finally....Its been two years...
Natural History
Finally...

- Life is long ....honesty, hardwork and humility pay.
Finally...

- Life is long ....honesty, hardwork and humility pay. And sense of humour.

What do we expect?

- You will comprehend what others cannot.
- You will be the message and the messenger.
- That you will be in the public sphere, and not merely an employee or a consultant.
Finally...

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What do we expect?

- You will **comprehend** what others cannot.
- You will be the message and the messenger.
- That you will be in the **public sphere**, and not merely an employee or a consultant.

- And yet you will be successful in the usual measures as well!

Development is indeed about comprehension, delivery, outcomes and role-models.
So let's keep trekking!