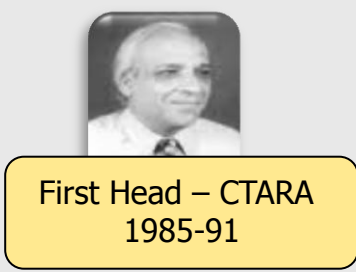
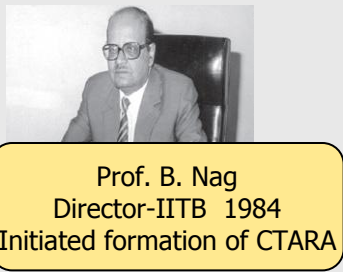


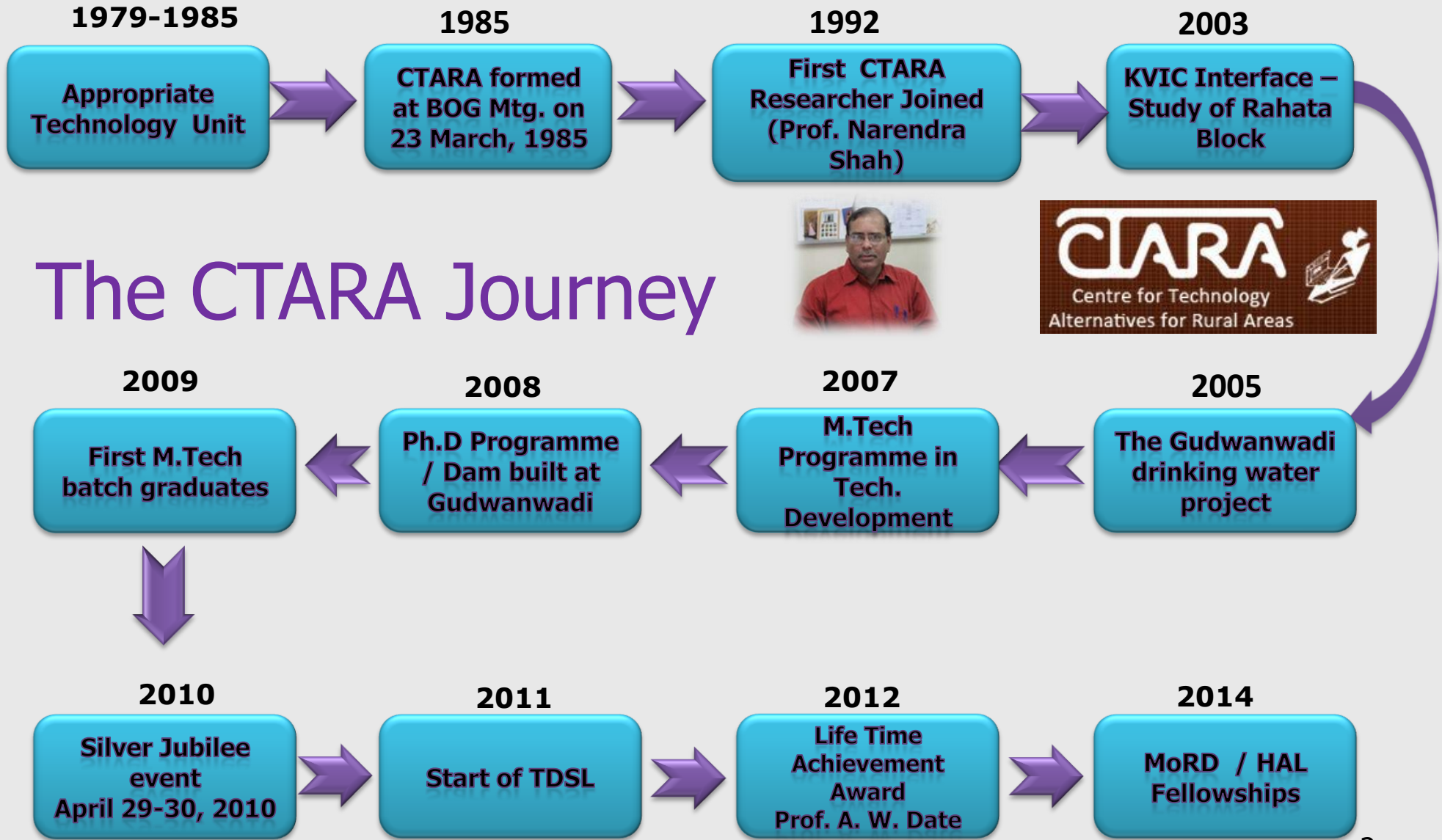
# Centre for Technology Alternatives for Rural Areas (CTARA)



Presentation To IITB Board of  
Governors 17<sup>th</sup> April 2014



Prototypes



# The CTARA Journey





# CTARA Status

<b>Faculty</b>	
Core	5
Assoc. (FT)	4
Adjunct	4

<b>Students / Staff</b>	
M.Tech	33
Ph.D.	22
Staff	4
Project Staff	7

Budget 15 lakhs (2013-14)

Space 2000 ft<sup>2</sup>



# CTARA Courses

## Semester 1

Development Theory & Policy: Indian Context
Soil, Land Use, GIS and Agriculture
Water Resources
Appropriate Technology
Ecology and Environment
Communication and Presentation Skills
Seminar

## Semester 2

Social Science Res Methods & Systems Dynamics
Public Policy and Governance in Tech. & Dev.
Energy Sources and their utilization
CTARA Elective I
CTARA Elective II
Institute Elective

## Semester 3

Project Management and Project Analysis
CTARA Elective III
M.Tech Project

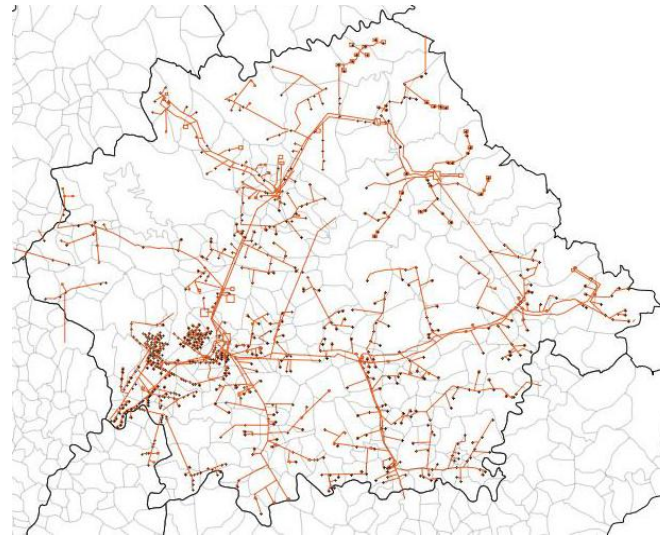
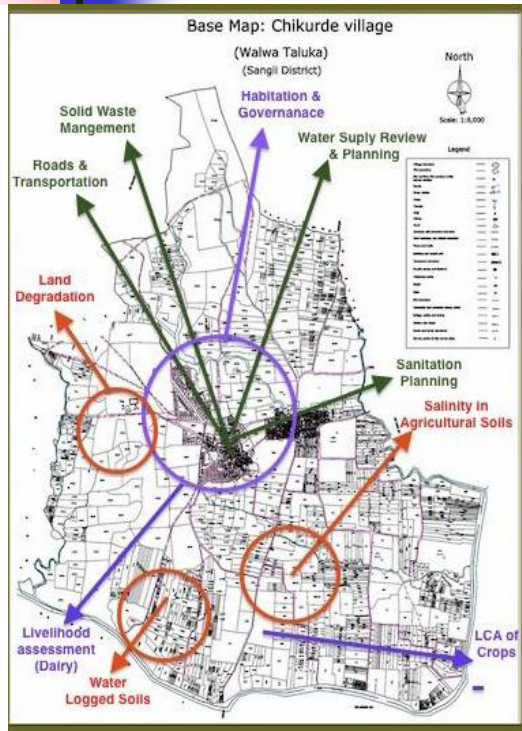
**Field study**

**M.Tech Project**

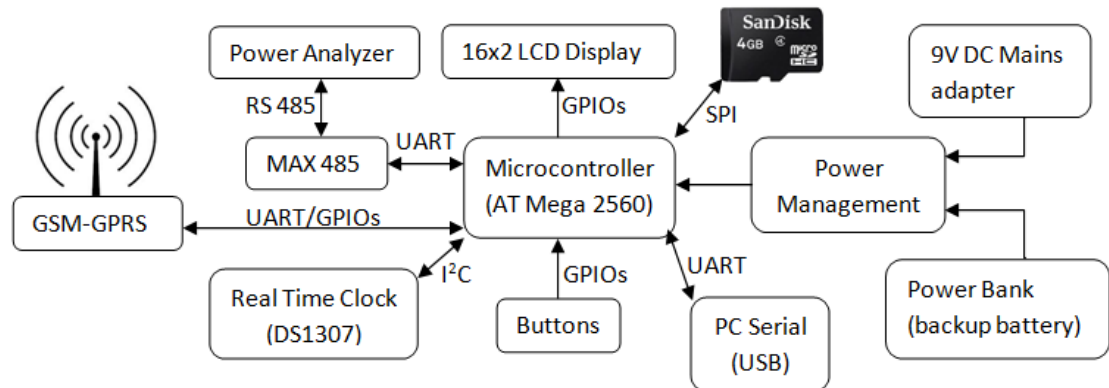
## CTARA Electives

Technology in Practice
Development in Practice
Rural Environmental Services Planning & Design
Development Protocols
Biofuels: Technology & Policy Perspective
Agro-based Industries: Design and Case Studies
Rural Electrification and the Power Sector in India
Rural Enterprises

# CTARA Research



Water  
Energy  
Food and  
Agriculture  
Industry  
Planning and  
Development





# CTARA Technologies



Innovation – reduced burden



Improved Herbal oil extraction process



Sold by local blacksmiths



Twisted tape swirlers

# CTARA Field impact

10 week field stay

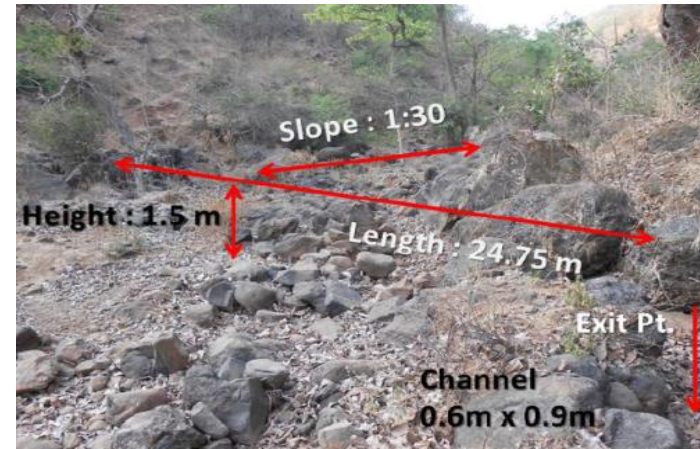
Field visit in each course

MoU- Parbhani, Shahapur,

Thane, Manchar

KVIC, SME

Engg Colleges- Karjat, Islampur



Diversion Irrigation scheme in Patan, Pune



Assessing drinking water access Chikurde, Maharashtra



Optimizing Hydram performance, Himachal Pradesh



# CTARA Policy Impact

- Water policy reforms in India and governance
- Ganga River Basin Environment Management Plan
- Decentralised technological and institutional solutions for urban water and sanitation services
- Scope of Bamboo Integration in Housing
- Localization of Solar Energy Through Local Assembly Sale and Usage of 1 Million Solar Study Lamps
- Panchayat planning for Solar Integration in Kerala
- Climate Change Policy Process in India
- Scope for scaling up Systems for Rice Intensification



# CTARA Review Process



Girish Sohani,  
CEO, BAIF  
IIT B alumnus



Prof. Rajendra Prasad,  
CRDT, IIT Delhi

February 5-6, 2014

Compilation of CTARA statistics,  
faculty research

Presentations – CTARA faculty

Interactions – Faculty

IDPC members

Interaction with students

Interaction with Institute  
management

Individual scoring and reports



# Review Findings- Strengths/ Weaknesses

## Strengths

- Field Orientation
- Faculty Quality and Potential
- Curriculum useful, relevant
- Inter-disciplinary
- TDSL

## Weaknesses

- Poor Infrastructure
- Technology Development
- Publication
- National/ International Exposure



# Review Recommendations

- Stronger Infrastructure, Institute Support
- Enhance Technology component
- Internal/ External outreach
- Enhance Publications/ Dissemination
- Enhance M.Tech, Specialisations – Thematic
- Advisory Committee
- Integration with RuTAG
- Entrepreneurship/incubation



# CTARA Action Plan

- Internal Outreach (Invitation, IFM)
- External Outreach- Poster, letters, Video interaction
- Enhance publications, open domain reports-CTARA Report Series
- CTARA 2020
- New course- Technology and Design Laboratory
- Enhance course offerings – Minor, DD, Enhance M.Tech (MORD,HAL Fellowships)
- Strengthen existing areas- Water, Energy, Food and Agriculture
- Catalyse new areas- Healthcare , Industry, Infrastructure
- Continuing Education Programmes, TEQIP





# Support Requested from IITB

- Resources – Minimum space – short term additional 3000 ft<sup>2</sup>, Current space sub-critical constraint for growth
- Enhanced Budget
- Institute Support for catalyzing greater faculty involvement – rural challenges
- Support CTARA to catalyse IITB research for impact in rural areas

A decorative graphic on the left side of the slide consists of overlapping yellow, red, and blue squares with a black crosshair.

# End-Note

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*The future of India lies in its villages*  
*M.K.Gandhi*

Thank You

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