

# Societal Development Projects By RIT, Rajaramnagar



Kasegaon Education Society's

#### RAJARAMBAPU INSTITUTE OF TECHNOLOGY,

(An Autonomous Institute)

RAJARAMNAGAR, Dist. Sangli, Maharashtra, 415 414.

### RIT at a Glance: Programs Offered

Sr. No.	Program	Year of Starting	Duration in Years	Intake capacity				
Undo	Under-Graduate Courses							
1	Automobile Engineering	1983	4	60				
2	Civil Engineering	1991	4	60				
3	Computer Science and Engineering	1999	4	60				
4	Electrical Engineering	2004	4	60				
5	Electronics and Telecommunication	2002	4	60				
6	Information Technology	2001	4	60				
7	Mechanical Engineering	1987	4	120				
Total	480							



### RIT at a Glance: Programs Offered

Sr. No.	Program	Year of Starting	Duration in Years	Intake capacity			
Post Graduate Courses							
1	Mechanical –Design	1999	2	24			
2	Electronics Engineering 2002 2						
3	Mechanical – Production 2004 2						
4	Civil – Structural	2004	2004 2				
5	CAD/CAM/CAE	18					
6	Automobile Engineering	2010	2	18			
7	Civil – Construction Management	2010	2	18			
8	Computer Science & Engg.	2011	2	18			
9	Electronics – Digital Systems	2011	2	18			
10	Electrical - Power Systems	2011	2	18			
11	Mechanical Heat Power	2015	2	18			
12	Master of Business Administration	1994	2	120			
	Total			330			
Ph. I	). Programs						
1	Mechanical Engineering	2008					
2	Civil Engineering	2008					
3	Electronics Engineering	2003					
	Grand Total			810			



#### Research Publications:

	Year 2014-15			Year 2013-14			Year 2012-13						
Name of Dept.	Referred journals	Non referred journals	Int. Conf.	National Conf.	Referred journals	Non- referred journals	Int. Conf.	National Conf.	Referred journals	Non- referred journals	Int. Conf.	National Conf.	No. of Citations
Automobile	00	15	12	11	00	20	15	00	01	24	14	00	288
Mechanical	02	13	09	38	03	22	22	03	03	56	12	21	286
Civil	01	31	01	29	01	30	07	01	00	09	05	18	201
E &TC	01	14	34	26	03	10	47	03	01	17	09	09	113
Electrical	12	03	17	00	02	02	19	03	01	01	20	00	139
CSE	05	01	15	06	00	00	13	00	02	01	04	03	192
IT	01	05	06	01	00	02	06	00	00	04	07	02	05
Total	22	82	94	111	09	86	129	10	08	112	71	53	1,224
Grand Total publications for 3 years = 787							Total Cita	tion =1,224					



### \* Patent filed: 26

Sr. No	Patent Name Name of the Contributor		Application Number	
1	A Drying and Roasting Solar Energy Apparatus and Method of Using the Same (Solar Grain Dryer)	Prof. S. B. Kumbhar	304/MUM/2013 04/02/2013	
2	Sinous Loop Wire Bending Machine	Prof. S.S. Gawade	738/Mum/2007 dt. 07/05/2007	
3	Improved Sugarcane Harvester and method of using the same (7 Patents)	Prof. P. P. Deshpande Ms. DS Salunkhe Ms. SS Salunkhe	1123/MUM/2011 dated 01/04/2011	
4	Adjustable & Automated Treatment platform of Dynamic back bending bench for Physiotherapeutic treatment	Prof. PP Deshpande Prof. DD Divekar	265/MUM/2013 dated 30/01/2013	
5	Vibration Massager	Dr. AB Kakade	2971/MUM/2013 dated 13/09/2013	
6	An apparatus for preparing curd	Dr. AB Kakade	2972/MUM/2013 dated 13/09/2013	
7	Vibration absorber system for controlling / minimizing vibrations	Mr. SB Kumbhar	2898/MUM/2013 dated 06/06/2013	
8	An Apparatus for Heart Blockage Diagnosis	Dr. AK Kakade Prof. MS Kumbhar Mr. BS Shete Mr. RP Hazare Mr. SS Kulkarni	3271/MUM/2013 dated 18/10/2013	
9	Electronic Geometric Compasses	Prof. SR Jagtap	3363/MUM/2013 dated 25/10/2013	
10	Hinge System	Dr. AC Attar	3364/MUM/2013 dated 25/10/2013	
11	Academic system based on mobile computing devices	Dr. (Mrs.) SS Kulkarni Mr. SS Kulkarni	3432/MUM/2013 dated 30/10/2013	
12	Interlocking bricks	Dr. AC Attar Mr. Marunmale AK	3434/MUM/2013 dated 30/10/2013	
13	An Inflating Arrangement	Mr. IT Mulani Mr. VS More Mr. AK Nagane Mr. SS Gijare Mr. SM Mulla	3520/MUM/2013 dated: Nov 2013	
14	Pneumatic Safety Device	Mr. IT Mulani Mr. VS More Mr. AK Nagane Mr. SS Gijare Mr. SM Mulla	3521/MUM/2013 dated: Nov 2013	
15	Automatic Agricultural Chemical Sprayer	Prof. Mrs. JS Awati	3867/MUM/2013 dated 12/12/2013	

### \* Patent filed

Sr. No	Patent Name	Name of the Contributor	Application Number
16	Tracking System for Vehicles with people flow management	Prof. M S Kumbhar Miss. SS Desai	4087/MUM/2013 dated 27/12/2013
17	Electronic Baby Cradle	Prof. M. S. Patil	91/MUM/2014 dated 10/01/2014
18	A Concentrated Solar PV Thermal Energy System	Prof. Supriya Sawant	1459/MUM/2015
19	Weed removal system and method	Dr.Anand Kakade	1453/MUM/2015
20	System and method for detection of Adulterated milk	Dr.Anand Kakade	1455/MUM/2015
21	A cutter assembly for a crop harvester	Prof.P.Deshpande , Ms. DS Salunkhe & Ms. SS Salunkhe	3596/MUM/2015
22	A bundling system and method	Prof.P.Deshpande, Ms. DS Salunkhe & Ms. SS Salunkhe	3597/MUM/2015
23	A conveyor system	Prof.P.Deshpande, Ms. DS Salunkhe & Ms. SS Salunkhe	3598/MUM/2015
24	Scraping Apparatus	Prof.P.Deshpande , Ms. DS Salunkhe & Ms. SS Salunkhe	3599/MUM/2015
25	Trimming mechanism	Prof.P.Deshpande , Ms. DS Salunkhe & Ms. SS Salunkhe	3725/MUM/2015
26	Material Handling System	Prof.P.Deshpande , Ms. DS Salunkhe & Ms. SS Salunkhe	4056/MUM/2015



#### \* Best Practices:

#### Mini project/Idea presentation

- \* Number of Patents filed increased
- \* Number of Publication increased in reputed journals
- \* Participation & Awards in the Avishkar University/State level, research competition for U.G.& P. G. Students
- Implementation of outcome based education
- One page strategic plan for institute development
  - \* Implementation of KRA system for senior faculty members
  - \* Implementation of PBS System for all faculty members

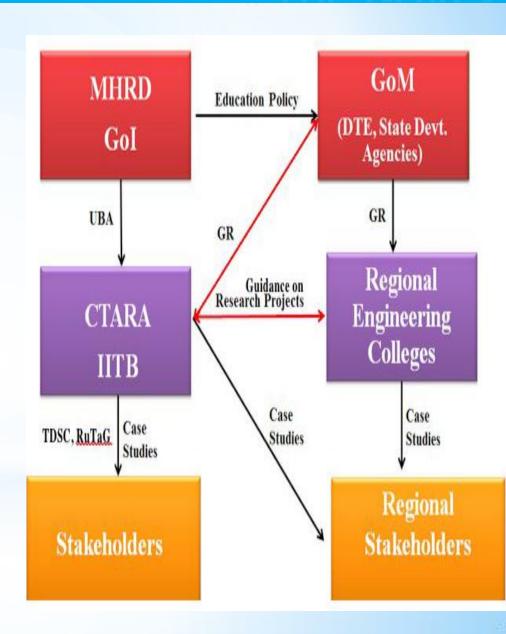
#### **► Quality Circle**

- \* Participated and awarded at National and International level
- \* Presentation of Institute best practices in International conference on International Level at Adelaide, Australia
- \* Invitation as a speaker for the Asian engineering education conference to china

#### \* TDC GOALS

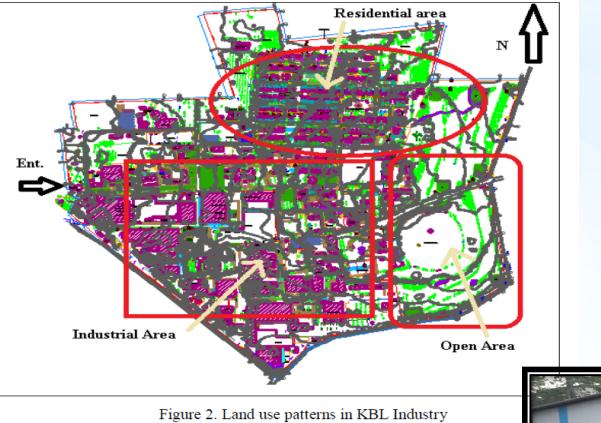
#### \*Objectives

- \*1.Address professional service requirements of regional bodies like municipal corporations and GPs
- \*2.Develop service model for the bottom 80% that *engages young engineers*
- \*3. Formulate development protocols and case studies for dissemination to regional colleges
- \*4.Provide a launching pad for entrepreneurial careers in the development sector



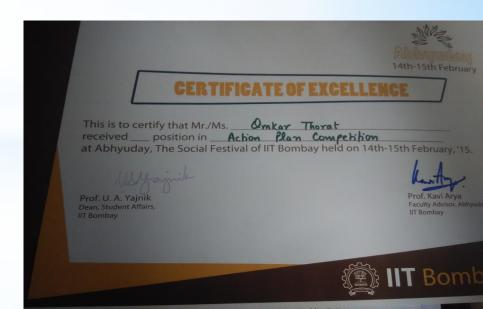
- \*MoU in April 2012.....
- \*Projects done
  - \*Watershed Management in Madgyal Village
  - \*Watershed management in KBL Industry LTD, Kirloskarwadi
  - \*R. R. Scheme analysis- Jadhavwadi-Banurgad
  - \*R. R. Scheme analysis- Atpadi
  - \*Summer Project (IIT Bombay) Planning of Environmental Services (Water and Sanitation) In Chikurde Village
  - \*Drought Mitigation Action Plan Sangli District BOMBAY







- \*Started in 2014.....
  - \*Woman Empowerment Abhyuday, IIT Bombay
  - \*Hazarwadi Village Development plan
  - \*Bhilawadi- Liquid and Solid Waste Management plan
  - \*Eco-Bappa
  - \*ANKURAN
  - \*Chullha Survey- MORD, IIT Bombay









- \*Smart City Development Plan- Islampur city
- \*Sewage treatment Plant- Ashta
- \*Gotkhindi Village development plan -
  - \* Meeting with Gotkhindi representatives on Village development plan on 10 Aug. 2016













# \*SOCIETAL WORK

- \*JALSWARAJYA PROJECT (2006-07) -
  - \*Worked as Technical Service Provider (TSP)
    - \* Designed water supply scheme.
    - \* Prepared detailed report and estimate.
    - \* Scheme 1) Gardi (khanapur)
      - 2) Shigaon (Walwa)
      - 3) Kasegaon (Walwa)
        - 4) Karandwadi (Walwa)
        - 5) Shiragaon (Walwa)

Completed consultancy and testing about 20 lac in year 2006-07

# \*Water sector

- \*Water testing and consultancy work.
- \*Water testing Training and distribution of Test Kit.
- \*Water sample analysis
  - \* River water sample
  - \* Groundwater sample
  - \* Waste-water sample from industry and drainage system



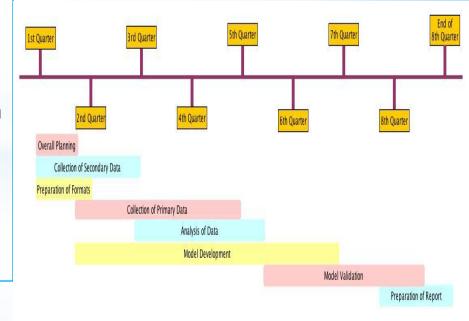
- \*EXPERIMENTAL INVESTIGATION OF WATER SCRUBBING METHOD FOR BIOGAS PURIFICATION
  - \*Prof. L. M. Jugulkar, Automobile Department
  - \*Dr. S. D. Yadav, Automobile Department

# \*Water sector

- \*Development of watershed management in high intensity rainfall situation in rural area by Prof. Vidula swami under the guidence of Dr. S.S. kulkarni
- \*Watershed management in Madgyal village along with CTARA.
- \*Drought mitigation action plan for Sangli district
- \*Rural Regional water distribution (R.R.) scheme analysis- Jadhavwadibanurgad scheme.

# \*Waterlogging- Agricultural sector

- \*Study of Waterlogging in Agricultural Areas in Sangli District of Maharashtra -
- \* Objectives -
  - \* To understand and analyze the irrigation schemes and systems undertaken in Sangli District,
  - \* To assess the extent of waterlogged area in District,
  - \* To map the degree of water logging problem in District
  - \* To map the remediation projects attempted in the area and their success/achievements
  - \* To assess the status of agriculture in Sangli District with the help of irrigation scheme,
  - \* To create awareness amongst the farmers on the impacts of over-water usage.



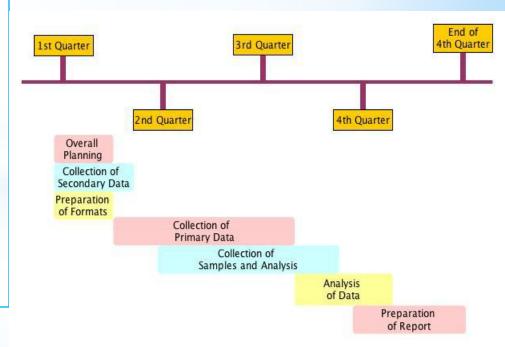
# \*Solid Waste Management

- \*Study of Solid Waste Management of Islampur City
  - \*Objectives -
    - \*To understand and study the present status of Solid waste Management of Islampur City.
    - \*To assess and analysis of Solid waste of Islampur City.
    - \* To test and classification of solid waste.
    - \*To suggest and implementation of effective method of Solid waste Management of Islampur City.
    - \*To create awareness amongst the citizens on the impacts of solid waste management.

\* Analysis of JalSwarajya Project in Sangli District in Maharashtra

#### \*Objectives and Scope

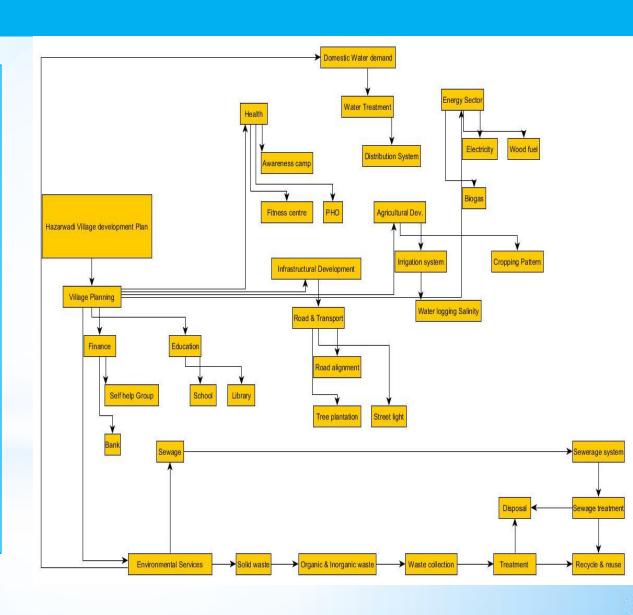
- 1. To analyze the Jal Swarajya Project I schemes and systems undertaken in Sangli District the mode of implementation, funding, community participation pattern, technical service providers selection and role, etc
- 2. To assess the technical, social, economic, environmental and financial success/failures of the projects in Sangli District.
- 3. To map the degree of water scarcity/excess problem in District through groundwater level status and extent of exploitation and water audits post Jal Swarajya Project I implementation.



# \*UNNAT GROUP

- \*Village development Plan -Hazarwadi Village
  - \* Roads
  - \*Sewerage system
  - \*Sewage treatment plant
  - \*(DPDC and CSR Funding)

\*Sewage Treatment Plant-Shivpuri



\*On going and Proposed new

**Projects** 

- \*Ongoing Project
  - \* Bilawadi Sewage Treatment Plant (STP)
  - \* Bhilawadi- Solid Waste Management Plant
  - \*MORD Chullha Project (With IIT Bombay CTARA)
    - \* Beradmachi
    - \* Dhagewadi
    - \* Konoli
- \*New Proposed Project
  - \* Smart City Development Plan-Islampur city
  - \*Sewage treatment Plant- Ashta



# UMA Meet at RIT

- \*Attended By (18/06/2016, G B Hall)
  - \*Dr. Milind Sohoni, CTARA, IIT Bombay
  - \*Mr. Rahul Gavade, BDO, Walwa Tahsil
  - \*Mrs. Rupali Sarnobat, Tahsildar, Walwa
  - \*Mr. Pankaj patil, CO, Ashta Nagarpalika
  - \*Mr. Sanjay Mali, Exe. Engg., Zilla parishad, Sangli
  - \*Institute Members
    - \* Dr. Mrs. S. S. Kulkarni
    - \* Dr. P. S. Patil
    - \* Prof. D. S. Patil
    - \* Prof. S. S. Kumbhar

## \*Rural Upliftment Projects-Future Scope

1. Watershed management:

1. At village level,

2. At regional level

2. Jal Yukta Shivar Project:

1. Identification and recharge of ground water

2. Natural water bodies source conservation

3. Sustainable development of watershed areas

- 3. Rain water Harvesting
- 4. Groundwater recharge and pollution control through modeling (MODFLOW)
- 5. Economical sewage water treatment plant
- 6. Village development plan
- 7. Drinking water distribution analysis (EPA NET)
- 8. Regional non-point source pollutant treatment
- 9. Drought mitigation Action Plan
- 10. Waterlogging and salinity- Sustainable Agricultural development
- 11. Women empowerment

### Thanks ....



