

A Report on
One day workshop
on

“Sustainable Planning Solution for Rural Development”

Rural
Development

Better
Villages
Better
Future

Towards
Sustainability



Sustainable
Solid &
Liquid waste
Management



Sustainable Water
Management



Organized by:



Gujarat Technological University, Ahmedabad

In collaboration with



*BVM Engineering College,
VV Nagar*



*Indian Society for Technical
Education*

GTU Sponsored
One Day Workshop on
“Sustainable Planning Solution
for Rural Development”
(In collaboration with BVM & ISTE)

Background:

With cities generating two-third of the country's economic output, an increasing number of Indians are leaving rural areas to seek employment in cities, relying on an efficient urban infrastructure. By 2030 it is predicted that 68 Indian cities will each have more than one million inhabitants, and six megacities, more than ten million each.

The rapid growth of cities causes a large number of challenges, including insufficient power supply, unreliable public transportation systems and limited access to adequate medical treatment. To meet the challenges of continuing growth without destroying the environment, rural planning for sustainable development is crucial.

The main motto to organize this workshop was

*“Rural development with sustainable approach can be key initiative
for better future of Nation.”*

& the major objectives were to encourage and support the basic and applied research in the field of Sustainable Solid & Liquid waste management, waste water utilization, Eco-Sanitation & Waste to energy Generation and to provide Sustainable Rural development techniques.



Gujarat Technological University is already working towards Rural development by initiating Vishwakarma Yojana: An approach towards Rurbanization, Rural Infrastructure development projects under Mahatama Gandhi National Rural Employment Guarantee Act (MGNREGA) & Clean Village: A Step towards Clean India Campaign.

Through this kind of Projects, the students of GTU are getting real work experience and are able to apply their technical knowledge and practices to a real problem. This entails hard work, many strenuous visits to the village and long discussions with the various stake-holders. The hard work put in by the students and the Faculty Members has made the project highly successful and GTU is proud of their achievements. The work of the students is being appreciated by many Gram Panchayats and many of them are moving to implement the designs given by the students. We have been expanding our reach from year-to-year and this relationship of GTU with the villages has proved to be an enriching experience for the GTU community. – **Dr. Akshai Agrawal**

Gujarat Technological University has organized One Day Workshop in collaboration with Indian Society for Technical Education & BVM Engineering College on “Sustainable Planning Solution for Rural Development” on 21st March, 2015 at BVM Engineering College.



Inaugural Session:

The Chief Guest of the workshop Shri D. A. Satya, IAS, Additional Development Commissioner, Panchayat, Rural Housing and Rural Development Department - Gujarat State, Prin. R. C. Desai, Hon'ble Jt. Secretary, Charutar Vidya Mandal, Er. H. N. Somani, Key Note Speaker, Dr. K. N. Sheth, Member- Board of Environment & Green Technology, GTU, Dr. F. S. Umrigar, Principal, BVM Engineering College and Prof.(Dr.) Indrajit Patel, Convener-Workshop have graced the event with their presence on the dias.



255 Faculties of Engineering colleges / Polytechnics, Professionals, Industrial Personnel, PG Students/ Research Fellows and UG Students working under Rural Infrastructure Development Project & Clean India Campaign from all over the state have participated in the workshop.



Prof. (Mrs.) Aarti Pamnani welcomed all. All dignitaries on the dias & off the dias had joined for lightening of the lamp as per our Indian tradition.

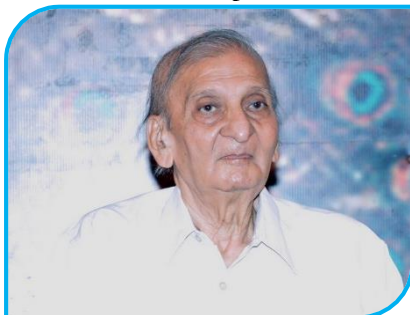


Dr. Indrajit Patel presented welcome speech. He initiated with the statement of Mahatma Gandhi “If we do not worry about our villages, our cities won’t improve. The task before every lover of the country is how to .. reconstruct the villages of India so that it may be as easy for any-one to live in them as it is supposed to be in cities.” Gujarat is one of the Indian states facing the acute pressure of burgeoning growth in its cities fuelled by migration and natural increase. He said that today, Gujarat is a model state when it comes to initiatives in rural development. Hon’ble Prime Minister’s vision and leadership of hon’ble Chief Minister has made it possible for Gujarat to not only attract industries and investments, but has also led to an improved quality of life in rural areas. He added that the Rural Development schemes in Gujarat deal with subjects as diverse as rural housing and employment, forestation, grievance redressal, sanitation, cleanliness and promotion of peace and neighborhood. This type of workshop is one step towards Sustainable rural development.



Dr. F. S. Umrigar highlighted importance of rural area in country’s development. Rural development is directly related for society development. He explained the importance of sustainable development for present & future too.

Shri D. A. Satya, IAS has initiated with the meaning of Sustainable development and why rural areas are preferred first. He explained by giving example of Korea, how the people of Korea are contributing for the development of their country. He also presented various schemes by our government which is playing core part in rural development. Young technocrats can lead for some steps by this kind of workshop towards sustainable development. He acknowledged the efforts of organizing team for such a topic.



Prin. Shri R. C. Desai addressed the audience by giving example of BVM Engineering college & its foundation taken place in small town for the development of rural youth. He explained the importance of rural development and how CVM is contributing towards this initiatives. He acknowledged the work done by GTU. His words motivated all the participants.



Dr. Snehal Mevada presented vote of thanks to the august gathering in the inaugural function.

Key note Session:

Key note session was delivered by Er. H. N. Somani, Principal Engineer, H. N. Somani & Associates, Solapur.

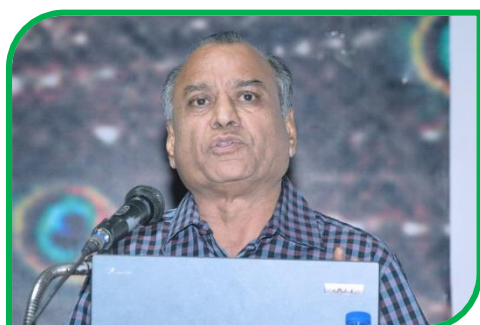
He presented different trends of engineering aspects in rural development. He presented various case studies of Maharashtra for better understanding of the participants. He explained how effective and sustainable development can be done for rural areas with respect to Infrastructure planning & management. His presentation was very much helpful to understand all the key components for village development.



Technical session -I:

Utilization of Waste water & Management in Rural areas by Shri Shashi Shah, Eminent Civil Engineer, Vadodara

He presented various techniques for utilization of waste water by explaining importance of water & problems due to waste water in rural areas. He explained various designs with case studies.



He also presented design of aerobic toilets. He discussed various types & components to design Rain Water Harvesting System and issues faced by village dwellers. He shared various examples with design for Rain Water Harvesting System for different conditions. His presentation included advance & innovative techniques for the construction with local material.



Zero waste campus at Kakanpur, Vadodara (100 % Conversion of Waste in to Energy)



Aerobic toilet



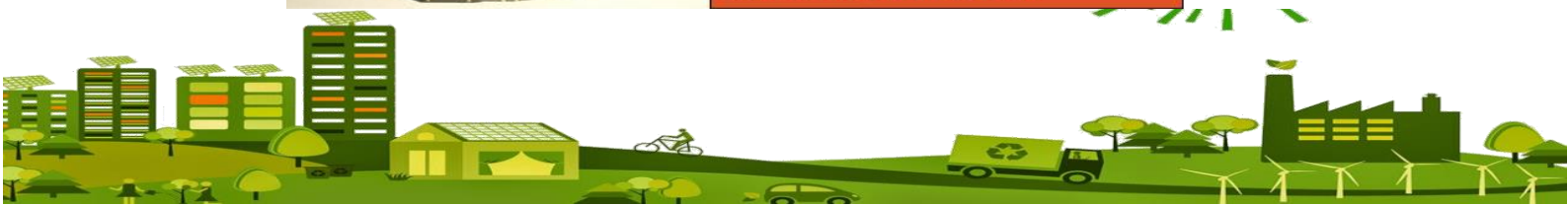
Technical Session -II:

Sustainable planning solution for Rural Development by Shri Gopal Shah, Former Town planner, VMC, Consultant for Urban planning, Infrastructure planning and tourism development.



In his presentation, he presented his studies to prepare detail project report for village. He covered all the aspects for developing villages effectively. Socio-Economic Survey, Technical details, Household survey details and various methodologies through which all parameters for better development can be covered. He presented the basic proposed design like Aanganwadi & School, Community hall and others which were demand of villages. He continued with the housing condition, Sanitation/ Storm drain with a proper map of Drain Network Design. He had explained about water supply system, solid waste management and provision of street lights in the village. He proposed road based on his evaluation in the village.

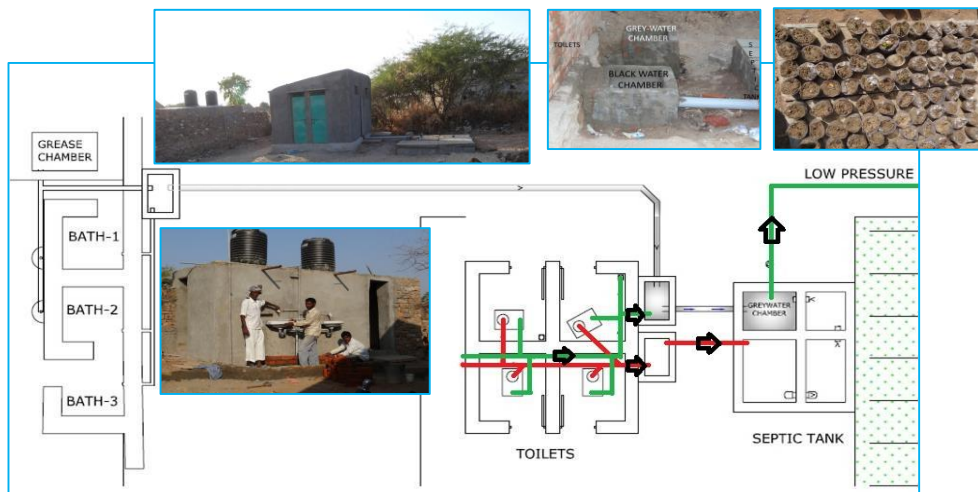
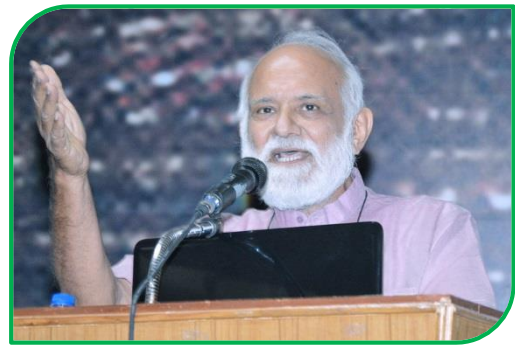
In addition to that he proposed various designs like Panchayat office, Lake development, Village square, Bus stand, Havado, Crematorium, Khadiyat, Environmental plans and Economic aspects for the development of village. He concluded his presentation by providing complete development summary of the village.



Technical session- III:

Sustainable use of water in Rural area by Shri Muni Raval, Expert, Hydro pneumatics, Surat

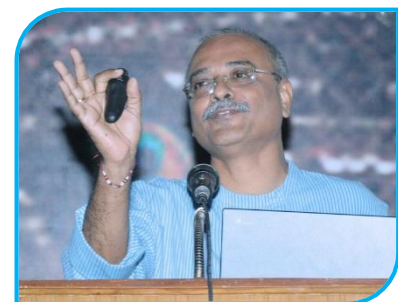
He started his presentation by emphasizing importance of water. He explained various techniques for sustainable use of water in rural areas. Eco sanitation is one of the feasible solutions to provide sanitation facilities in rural area, it has more benefits than our current wasteful practices explained by him by giving live case studies of villages from Kutch district where there are more water problems. He informed that standard design considerations based on the requirement of users and local climatic conditions are useful in optimising the design of toilet units. The design considerations can be grouped into various aspects such as anthropometric requirements, climatic conditions and wind and sunlight penetration.

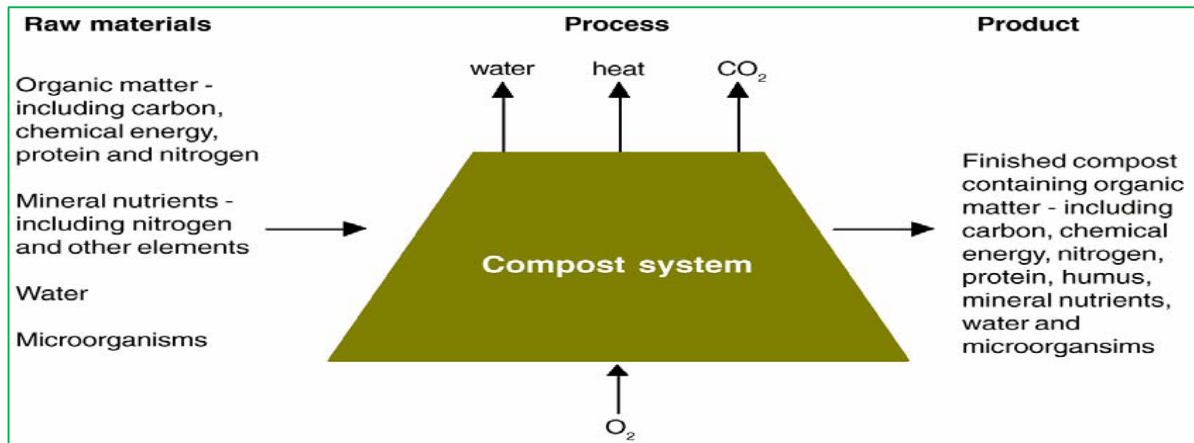


Technical session- IV:

Sustainable Solid Waste Management in villages by Dr. Vatsal Patel, Chief Town Planner, AMC, Ahmedabad

He initiated by explaining the basic meaning of solid waste with its classifications. He also explained various techniques for managing solid waste in rural & urban area. He explained how the waste of rural areas differ from urban areas. Various methods to manage solid waste in rural areas, how to convert it in wealth was explained by him. His presentation was very much fruitful to solve the issue of solid waste in rural areas.





Panel Discussion on Waste to energy by

Dr. K. N. Sheth, Dean, GTU, (Member, Board of environment & Green technologies, GTU) &

Mr. Sanjay Patel, CMD of SP Renewable energy source Ltd (Member, Board of environment & Green technologies, GTU)



Dr. K. N. Sheth presented fuel production from waste. He informed about various advantages and use of this kind of fuel for the benefits of village dwellers. He exhibited the manufacturing techniques of the same.

Mr. Sanjay Patel presented various sustainable solutions for villages of India. He mainly focused on the design of Biogas Plant for the village condition of Gujarat. Design manufactured by him was optimum solution for the Indian villages. He explained the concept of waste to energy and how it can be benefited to Indian Villages. He explained applications of biogas plant.



Valedictory session:

The workshop was concluded with valedictory session with the Certificate distribution to all the participants. The chief guest of the function was Dr. S. V. Vaishnav. Expert speakers Dr. K. N. Sheth, Shri Muni Raval, Er. H. N. Somani, Programme coordinator Prof. (Dr.) Indrajit Patel, remain present in the session.



The concluding remarks was given by Prof. (Dr.) Indrajit Patel, Program Coordinator. He highlighted the immense contribution of the various sponsors and organizers and special thanks to Hon'ble Vice chancellor, Dr. Akshai Agrawal, GTU for the valuable support to the workshop. He also acknowledged the work done under Vishwakarma Yojana, Rural Infrastructure development projects under Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) & Clean Village: A Step towards Clean India Campaign by the team of GTU.

He also thanked CVM and ISTE for always encouraging such events. He shared his views for such workshops which need to be taken more with great enthusiasm. Academicians and professionals also shared their feedbacks about the program.

Dr. S. V. Vaishnav shared his views and demand of topics in context with nation development. His words inspired & encouraged to all the participants. He congratulated all and mentioned that GTU & CVM is always supporting for the growth of students as well as faculties to build strong nation by enriching the education.

Prof. Vishal Arekar presented vote of thanks to the participants, organizers, supporting partners, all the faculty members and all who directly or indirectly supported the workshop for successful completion.

The workshop ended with the National anthem.

On behalf of GTU, BVM & ISTE

Prof. (Dr.) Indrajit Patel

Ms. Jagruti Shah

Dr. Snehal Mevada

Prof. Vishal Arekar



Glimpse of the workshop:

