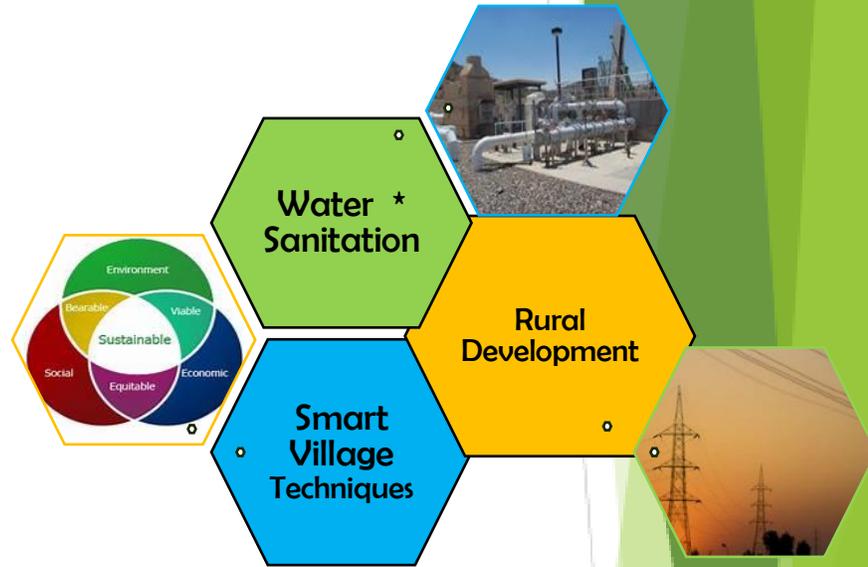
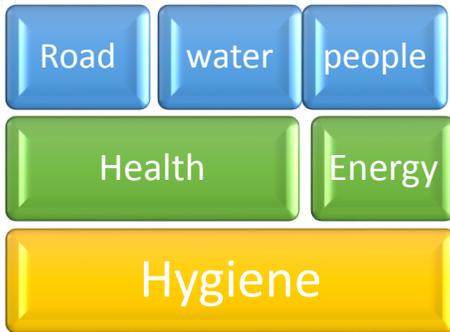


A Report On

“Vishwakarma Yojana phase-v”

TECHNICAL WORKSHOP (CIVIL)

For Rural Villages & Smart Cities



Date: 23rd March, 2018, 10.30 AM to 5.30 PM

Venue : B0-Conference Hall . GTU Campus.

Presented by:

Prof. (Dr.) Indrajit Patel

Ms. Darshana Chuhan



GUJARAT TECHNOLOGICAL UNIVERSITY
Ahmedabad

Gujarat Technological University,
Ahmedabad, Gujarat.

Technical workshop of Vishwakarma Yojana Phase-V at GTU, Chandkheda Campus



Concept by Prof. Dr. Navin sheth, Hon'ble Vice Chancellor:

The aim of the Vishwakarma Yojana was to study village life with respect to the delivery of basic needs and then to re-imagine, redesign, rejuvenate and strengthen the community life. Any research work without direct relevance to the society will not normally lead to great Engineering Research. The students are required to re-imagine & redesign the infrastructure and make sure that the soul of the village is supported by the new architecture.

Gujarat Technological University had organized a One Day Technical Workshop of Vishwakarma Yojana Phase-IV for the students of Civil Engineering on “**For Rural Villages & Smart Cities Sustainable Planning for Rural Area–Repair, Redevelopment, Redesign & Sustainable Water and Sanitation**” held on **23rd March, 2018** at GTU, Chandkheda Campus.

Prof.(Dr.)S.D.Panchal, Registrar, GTU welcomed Experts Faculty , all invitees & participants in the workshop, and given the insight of the Vishwakarma Yojana Project and its importance as a project.

Ms. Darshana Chauhan, OSD. given introduction of the Expert speakers **Mr.Harshal Parikh-L & T Construction, Prof. Dipsha Shah-CEPT University, Prof.(Dr.) C.D.Upadhaya-L.D.College of Engineering , 10** Nodal officers and 250 students from 32 Institutes affiliated with GTU were remain present. She explained that **Prof.(Dr.) Indrajit Patel**, Honorary Director-Vishwakarma Yojana Project, Principal-BVM Engineering College, Vallabh Vidhyanagar , who’s constant support making this project successful.

Technical Session has been clustered in Two core themes:

- (I) Sustainable Planning for Rural Area–Repair, Redevelopment, Redesign
- (II) Sustainable Water and Sanitation



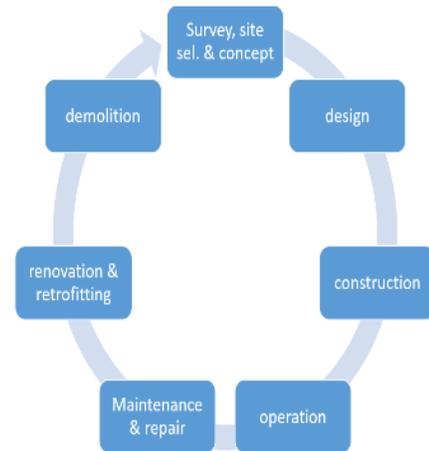


Technical Session I

Sustainable Planning for Rural Area—Repair, Redevelopment, Redesign

The first Session was conducted by **Mr. Harshal Parikh**. Mr. Parikh has done his Post graduation in civil engineering and having professional experience of more than 13 years in the field of large scale infrastructure development and area development works. At Present Mr. Parikh is working with L & T Construction Company as a Design Director for Dholera Smart city Project in which he is single point Design Coordinator for all the infrastructure design for the project. He is also a single point of contact for Client and Employers Engineer from L&T.

Project Life Cycle



Mr. Parikh highlighted importance of rural area and explain slogan of Respected Mahatma Gandhi “India lives in its villages” In his session Mr. Parikh explained about Project life cycle in detail with starting of site selection, planning, designing, execution, maintenance & repair for typical projects. Details for Planning, designing and execution for maintenance for buildings, roads, water supply, sewerage system & Elevated storage reservoir was presented and discussed in brief by Mr. Parikh. Mr. Parikh expressed feelings for saving water he has given various tips for the same.

Mr. Parikh demonstrated maintenances for buildings which needs periodical, day to day, monthly and annual attention. Following are the brief points for such maintenance for building/structure:-

Maintenance

- 1) Day to day Maintenance Plumbing, Drainage, Electrical,
- 2) lawn, Plants, hedge cutting, manhole cleaning
- 3) Annual Maintenance—Patch work, White washing, painting,
- 4) lift, A.O Plant, Heater, Water pumps, Door, window, Glass,
- 5) wiring damage, Painting to M.S grills, Trees, Fire fighting
- 6) system, CCTV, UPS system,
- 7) Preventive Maintenance- Planning stage before construction
- 8) Special Maintenance — Water proofing, replacement of
- 9) sanitary & plumbing fittings, replacement of doors & windows, internal road



Mr. Parikh explained importance of sustainable buildings and Green villages. He explained IGBC Green Village rating system for identification & implementation of green features in villages.

Green Villages

- 1) IGBC Green Village is a rating system for identification &
- 2) implementation of green features in a village
- 3) Modules of IGBC (Indian Green Building Council) Green village :-
- 4) Health & Hygiene
- 5) Village Infrastructure
- 6) Water Conservation
- 7) Energy Availability & Efficiency
- 8) Material & Resources
- 9) Social & Community Actions
- 10) Green Innovation

Mr. Parikh shared 10 minutes video related to Rehabilitation & redevelopment of General Hospital Bhuj which was redeveloped / reconstructed after Earthquake 2001. The unique feature of the Hospital building is the “Base Isolation technology “is used in construction. Mr. Parikh shared another 5 minute video related to Ground water recharge by injection well method.

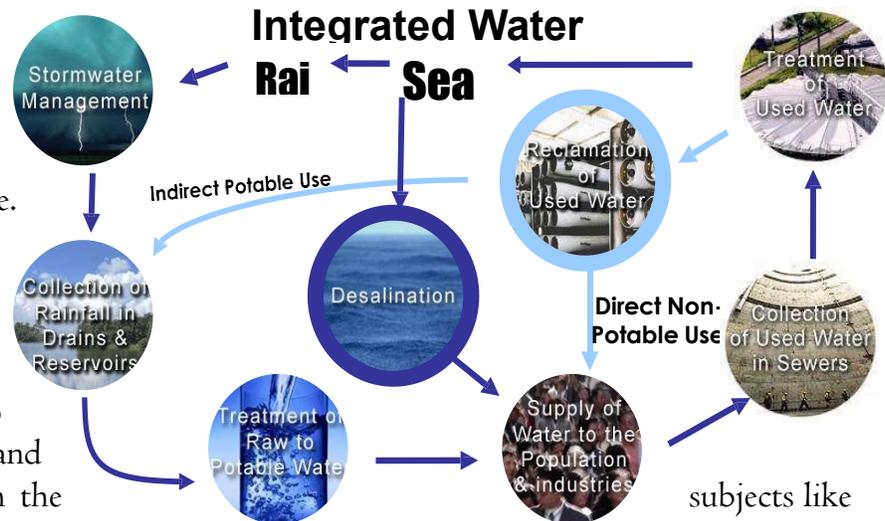
At the end of the session participants asked various questions related to Ground water recharge, Rainwater harvesting, Repair of Elevated Storage Reservoirs & Buildings.

Technical Session II

Sustainable Water and Sanitation

The Second Session has been conducted by **Prof. Dipsha Shah-CEPT University** having more than 10 years of experience. She is an environmental engineer, environmental manager and an academician. She delivered the many expert lectures to various academic institute and training program. She teach the

Closing of the Water Loop



subjects like



water and wastewater engineering, Environmental Air .

Pollution, Fluid Mechanics, Building Services (Plumbing), Environmental Studies, Solid Waste Management, Ward Level Infrastructure Design Studio, Water and Wastewater Analysis at CEPT University.

She delivered the lecture on Sustainable Water and Sanitation to Smart Cities and Villages. She took the three case studies: Yamuna River, GIFT City and Singapore City. Through Yamuna River case study, students realized, how and up to what extent the river water is polluted due to withdrawing the river water without maintain ecological flow and disposing the wastewater without providing proper and sufficient treatment. Through the case study of GIFT city and Singapore, students understood about measures and steps should be taken and infrastructure and technology should be provided to make the city or a small area or village to zero liquid discharge area, to increase the percentage of reuse and recycle of water, to conserve water and to reduce the dependency on water sources. For smart Villages, she took Hivre Bazar Case studies. Through this case study, students knew about the steps taken and technologies adopted by the villagers to increase the ground water table, to increase the agricultural productivity, to diminish water scarcity and to improve living life style.

Project Guidelines Session

Ms. Darshana Chauhan briefed about the points of VY-Phase-V-Part-I Project Detail reports designs. She has explained all the chapter wise where students needs to develop their report. She has also explained in detailed queries related to part –II project report. Nodal officers also shared their views and understanding for designs in villages. She gave solutions to different technical as well as administrative issues for village planning and development of the report. She had explained the design proposals for overall development of village includes Physical, Social and Socio-Cultural infrastructures facilities based from the gap analysis as well as chapters from future scope of the study from people’s responses and various recommendation & suggestions for Sustainable village development should be included in DPR. She shared various guidelines for designing part. She explained techniques for overall development of village with effective and sustainable planning.

On Behalf of GTU-VY Section student expressed their gratitude and sincere thanks to Prof. Dr. Navin Sheth, Hon’ble Vice Chancellor for giving the students opportunity for this village development valuable. She thanked Prof. Jagruti shah for her constant support. She thanked all eminent speakers, Students, Nodal Officers, Co-coordinators of Vishwakarma Yojana for making the workshop successful.





On behalf of GTU
Dr. Indrajit Patel
Ms. Darshana Chauhan

