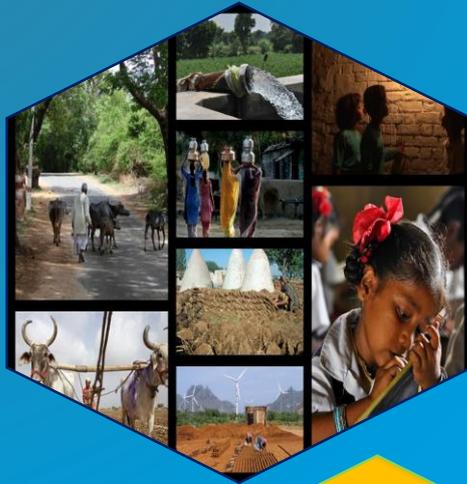


A Report on Orientation Programme of

Vishwakarma Yojana:

An approach towards Rurbanization

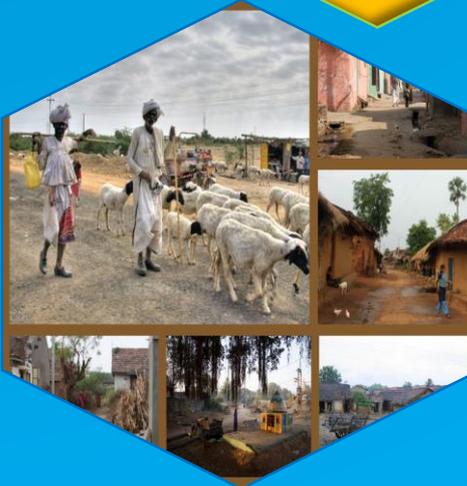
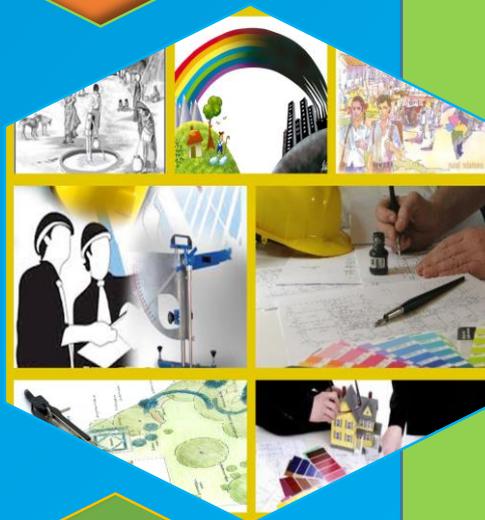


Reimagine

**Village
Development**

Rurbanization

Redesign



Rejuvenate

**Sustainable
Development....**

Venue: Gujarat Technological University, Chandkheda Campus

5th July, 2015

Presented by: Dr. Indrajit Patel & Ms. Jagruti Shah



*Gujarat Technological University,
Ahmedabad, Gujarat*



Gujarat Technological University,
Ahmedabad, Gujarat.

Orientation Program of Vishwakarma Yojana: Phase-III at GTU, Chandkheda
(5th July, 2015)



Concept by Dr. Akshai Agrawal, Hon'ble Vice Chancellor, GTU:

“Developing a village with urban amenities while retaining and nurturing its soul”

Vishwakarma Yojana is one of the initiatives towards Rurbanization by Government of Gujarat, which was allotted as a pilot project to GTU. The students and Faculty Members meet all the stake-holders in a village, survey the existing facilities. Then they re-imagine and re-design the whole of the infrastructure of the village. The students use their engineering skills to prepare detailed project reports for the infra-structure as a part of their Final Year project work. Through the Yojana, 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.

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.

Gujarat Technological University organized the Orientation Program of Vishwakarma Yojana for the students and Nodal Officers, participating in Vishwakarma Yojana: Phase – III held on 5th July, 2015 at the Conference Hall, Gujarat Technological University, Chandkheda Campus.

23 Nodal officers and **402 Students from GTU affiliated colleges** attended the Orientation Program. (Refer. Annexure)

Vishwakarma Yojana is now in Third Phase to introduce Project and Scope of work of Students & nodal officers, GTU has planned to organize orientation program for students & Nodal officers coordinated by Project Coordinator, VY with support from GTU and participating institutes. Main objective of this program was to provide all the information of Vishwakarma Yojana, details of Techno-Economic Survey and other necessary details of the Project. Orientation program was organized for villages



which included Ahmedabad, Gandhinagar, Banaskantha, Amreli, Bhavnagar, Junagadh, Rajkot, Kutchh, Mehsana, Patan, Sabarkantha, and Jamnagar District.

Ms Darshana Chauhan welcomed all invitees on behalf of Gujarat Technological University. She welcomed all the participants and Faculty members. She has briefed about all the administration process to the participants. She gave various guidelines to students & Nodal officers for all the process to be done throughout the year.



Technical Session:

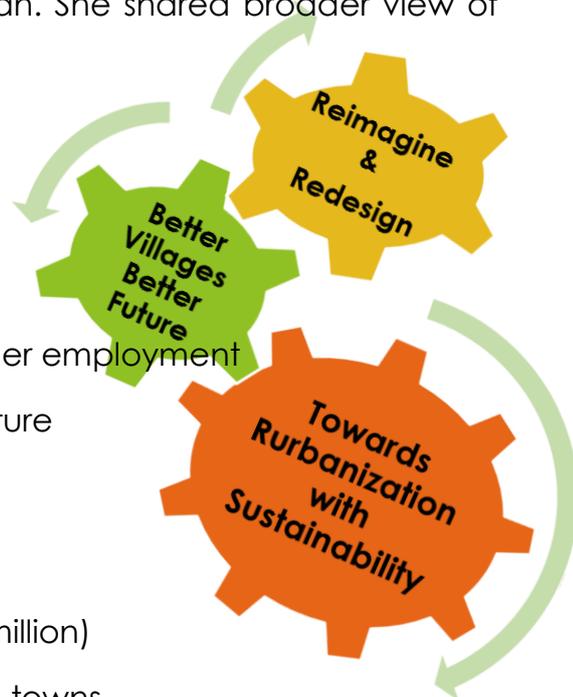
Ms Jagruti took over for session and welcomed all the participants on behalf of GTU. She briefed students for concept of Rural and Urban. She shared broader view of Rural & Urban India:

Rural India

- Mass migration to urban India
- Malnutrition & starvation
- Illiteracy & widespread unemployment or under employment
- Inadequate health facilities & basic infrastructure

Urban India:

- Growth rate: Expected to double by 2021
- Top heavy growth: Faster in Class I cities (> 1 million)
- Asymmetric distribution: > 70% in less than 10% towns
- Socio-economic status: 25.7% below poverty line



- Proliferation of slums in Urban Areas – limited low cost/ affordable housing options

She asked students about their concept for developed Villages. She gave some glimpse of ideal villages of Gujarat. She said as per National Sample Survey Organization (NSSO) defines 'rural' as follows: An area with a population density of up to 400 per square kilometer, Villages with clear surveyed boundaries but no municipal board, A minimum of 75% of male working population involved in agriculture and allied activities. She explained overall concept of Vishwakarma Yojana. She has also briefed for the work done in Phase-I by Students of respective Institutes. Aim of the project is to provide urban amenities in rural areas and maintaining the rural soul. This will help in developing villages in sustainable manner, reduce migration from villages and prevent the cities from the urban pressure.

She also described all the objectives to students such as developmental work in villages that could be undertaken as per the need of the village, in particular includes Physical infrastructure facilities (Water, Drainage, Road, Electricity, Solid waste Management, Storm Water Network, Telecommunication & Other), Social & Socio





cultural infrastructure facilities (Education, Health, Community Hall, Library, Recreation Facilities & other) and renewable infrastructure facilities (Rain water harvesting, Biogas plant, Solar Street lights & Other) for Sustainable development.

She explained in detail over all action plan and methodology of work by Degree & Diploma students. She also discussed all the issues faced by students in Phase-I & II and given solution for the same. She said rural development can be richer and more meaningful only through the participation of clienteles of development. Just as implementation is the touchstone for planning, people's participation is the centre-piece in rural development. People's participation is one of the foremost pre-requisites of development process both from procedural and philosophical perspectives. Mrs. Jagruti Shah explained roadmap of work to be done by students in each semester. She also explained work separately, chapter wise.

Part-I (Odd Semester) Includes:

- **Literature Review**
- **Visit of Ideal Village of Respective District**
- **Data Collection- Techno economic survey**
- **Data Presentation**
- **Gap Analysis (Guidelines, Regulation and Literature will be given for comparison)**
- **Design Proposals for Sustainable Planning includes Non-conventional energy Sources**

She gave guidance to all the participants for techno-economic survey work. She explicated Survey form and defined all the parameter of Survey.

Part-II (Even Semester) Includes:

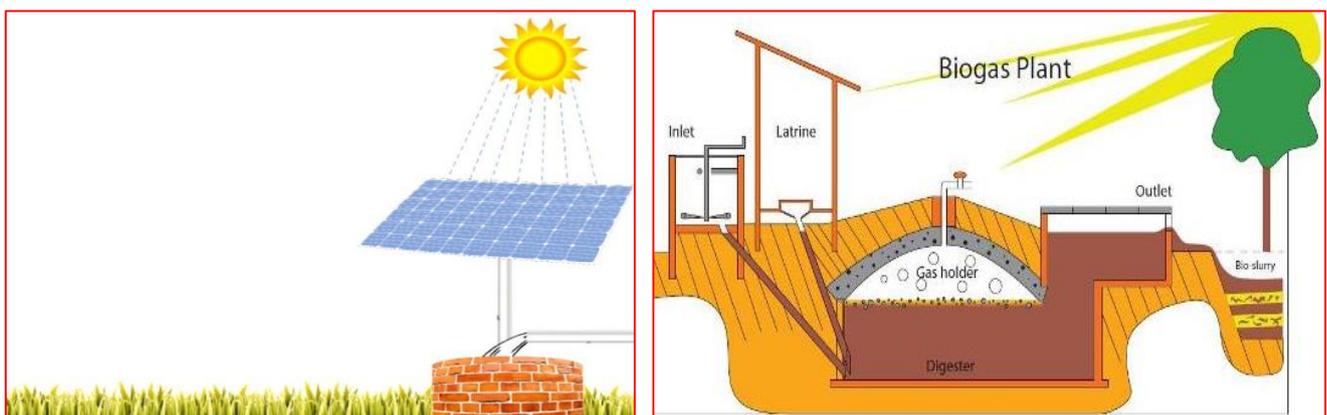
- **Design Proposals for Overall development of Village includes Physical, Social and Socio Cultural Infrastructures Facilities (Holistic Plan approach)**
- **Repair & Maintenance of Existing Infrastructure Facilities**
- **Recommendation & Suggestions for Village Development**
- **Conclusion**





She shared various developments in villages of Gujarat with live case studies such as for the waste water network, model of village Khintla, Surendranagar for Low cost network and resource utilization. She gave brief details of Root Zone Technology for Liquid waste Management. For Solid waste management, TAPI-Model, adoption will be the best solution for economic boost up and clean village philosophy. She explained concept of village sustainable system with all these examples. She covered all the amenities from grass root level to developed town level for village development.

She shared various guidelines and norms for physical as well as social infrastructure facilities. She also addressed students for different workshop and training Program which will be planned to help students for all technical guidance by GTU.



She said that all the proposal are designed by keeping the following parameters in mind like built and landscape into a cohesive whole, Water charging / reuse as integral part of the design process, Major thrust into local / regional species, Low energy intensive, Low maintenance , Creation of sustainable environments, In tune with Sun / wind / water / soil, Introduce alternate energy sources, Generate an effective reuse & recharging the water basin, Introduce separate systems of distribution network for raw water and drinking water, Drainage to be treated with root zone technology and reuse the treated water for Sustainable Development. At the end of the presentation, students and nodal officers asked various questions and solutions were given for the same. Discussion was very much helpful to students and nodal officers to fill technical gap as well as to share their views.





Ms. Darshana Chauhan expressed her deep sense of gratitude to Dr. Akshai Aggarwal, Hon'ble Vice Chancellor, Gujarat Technological University-Ahmedabad for his encouragement and support during project work, Shri J.C. Lilani, I/C Registrar GTU, all students, Nodal Officers, Conference section and Team of GTU for making orientation program successful for Vishwakarma Yojana.

On behalf of Vishwakarma Yojana, GTU, Ahmedabad

Prof. (Dr.) Indrajit Patel

Ms Jagruti Shah

Ms Darshana Chauhan





Annexure

List of Institutes attended Orientation program at GTU, Chandkheda Campus:

Sr. No.	Name of the Institute	No. of Students Attended with Nodal Officer	Institute	Name of the Taluka & District where your respective Institute Situated
1	Atmiya Institute Of Technology & Science For Diploma Studies	12	Polytechnic (Diploma)	Rajkot
2	C U Shah Govt. Polytechnic	10	Polytechnic (Diploma)	Surendranagar
3	Dr J. N. Mehta Government Polytechnic, Amreli	15	Polytechnic (Diploma)	Amreli
4	Government polytechnic for girls, Ahmedabad	18	Polytechnic (Diploma)	Ahmedabad
5	G P Himmatnagar	17	Polytechnic (Diploma)	SABARKANTHA
6	R C T I, Ahmedabad	14	Polytechnic (Diploma)	Gandhinagar
7	B. P. T. I., Bhavnagar	10	Polytechnic (Diploma)	Taluka - Bhavnagar, Dist. - Bhavnagar
8	Tolani Foundation Gandhidham Polytechnic, Adipur	07	Polytechnic (Diploma)	Taluka : Gandhidham & District : Kachchh
9	F. D. (Mubin) Institute of Engineering and Technology	24	Polytechnic (Diploma)	Dehgam, Gandhinagar
10	Suraj Muchhala Polytechnic	05	Polytechnic (Diploma)	Gondal, Dist Rajkot
11	B H.Gardi College of Engineering and Technology	16	Engineering College (Degree)	Ta:Kalawad Dist :Jamnagar
12	VGEC - Chandkheda	14	Engineering College (Degree)	AHMEDABAD
13	Government Engineering College, Patan	08	Engineering College (Degree)	Patan
14	Hasmukh Goswami College Of Engineering	03	Engineering College (Degree)	Daskroi
15	L D College of Engineering	12	Engineering College (Degree)	Ahmedabad
16	L.J Institute Of Engineering And Technology	16	Engineering College (Degree)	AHMEDABAD



17	Narnarayan Shastri Institute Of Technology, Jetalpur	21	Engineering College (Degree)	Ta: Daskroi, Dist: Ahmedabad,
18	S.P.B. Patel Engineering College	13	Engineering College (Degree)	Mehasana
19	Sankalchand Patel College of Engineering, Visnagar	14	Engineering College (Degree)	Ta- Visnagar, Dist - Mehsana
20	Shantilal Shah Engineering College Bhavnagar	20	Engineering College (Degree)	BHAVNAGAR
21	V.V.P. Engineering College, Rajkot	19	Engineering College (Degree)	Rajkot
22	Marwadi Education Foundation's Group of Institutions - Faculty of Engineering	22	Engineering College (Degree)	Rajkot
23	Government Engineering College, Palanpur	31	Engineering College (Degree)	Banaskantha
24	Shankersingh Vaghela Bapu Institute Of Technology	08	Engineering College (Degree)	Gandhinagar
25	SAL, Ahmedabd	18	Engineering College (Degree)	Ahmedabad
26	Shri Labhubhai Trivedi Institute of Engineering and Technology	17	Engineering College (Degree)	Taluka :- Gondal, District :- Rajkot
27	AIT, Ahmedabad	04	Engineering College (Degree)	Ahmedabad
28	Arham Veerayatan Institute Of Engineering, Technology & Research	05	Engineering College (Degree)	Mandvi-Kutch
29	OM Engineering College	07	Engineering College (Degree)	JUNAGADH
30	GEC, Bhavnagar	07	Engineering College (Degree)	Bhavnagaar