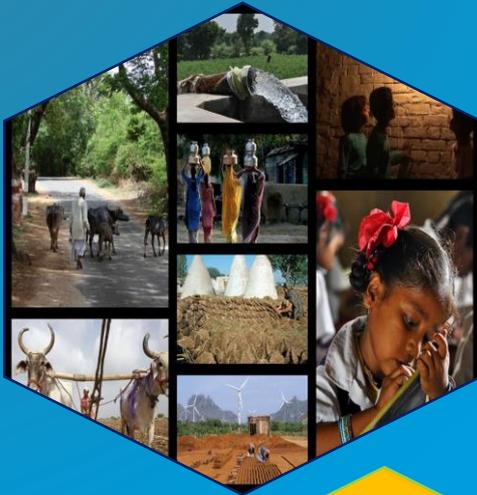


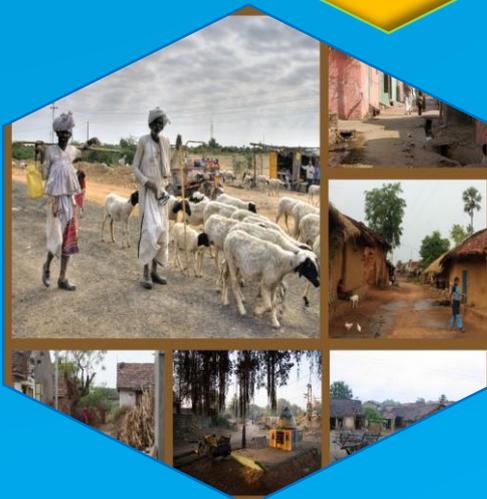
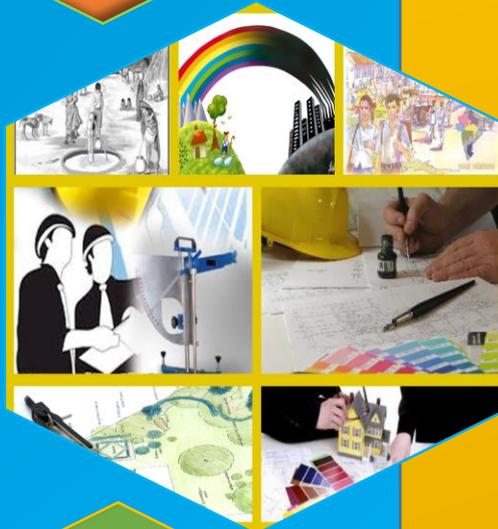
A Report on Orientation Programme of
Vishwakarma Yojana:
An approach towards Rurbanization



Reimagine

**Village
Development**

Rurbanization *Redesign*



Rejuvenate

**Sustainable
Development....**

Venue: BVM Engineering College, VV Nagar

4th 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 VV Nagar
(4th July, 2015)



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

The concept of Rurbanization aims at regeneration and revitalization of both the physical as well as social environment in villages through a judicious and economic consumption of resources. It is designed to reduce and remove the rural-urban divide and to lead to process of rural transformation that is not exploitative.

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 a Faculty Member 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 infrastructure 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.





Orientation Program of Vishwakarma Yojana: Phase-III

Gujarat Technological University organized the Orientation Program of Vishwakarma Yojana for the students and Nodal Officers participating in Vishwakarma Yojana: Phase – III held on 4th July, 2015 at the Auditorium, BVM Engineering College, Vallabh Vidyanagar.

Dr. F. S. Umrigar, Principal, BVM Engineering College. Prof.(Dr.) Indrajit Patel, Hon'ble Director-VY, Dr. A. K. Verma, Head Structural Dept., Dr. L. B. Zala - Head, Civil Dept., Dr. Parekh – Head, Electrical Dept., Ms. Jagruti Shah, Project Coordinator-VY, GTU, **24 Nodal officers and 444 Students** from GTU affiliated colleges attended the Orientation Program. (Refer. Annexure)



Vishwakarma Yojana is now in IIIrd Phase. To introduce Project and Scope of work of Students & nodal officers, GTU organized an orientation program for students & Nodal officers, coordinated by Ms. Jagruti Shah, 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 Project. Orientation program was organized for villages which included Anand, Surat, Panchmahal, Chhotaudepur, Valsad, Tapi, Vapi, Bharuch, Mahisagar, Navsari and Vadodara District.

Mrs. Jagruti Shah welcomed all invitees on behalf of Gujarat Technological University and requested Dr. Indrajit Patel, Hon'ble Director to brief about Vishwakarma Yojana.

He welcomed all the participants and faculty members. He initiated his speech with concept of Vishwakarma Yojana: **“Savidha Saher ki Atma Gaon Ki”**. He said that rural



Orientation Program of Vishwakarma Yojana: Phase-III

development has assumed global attention especially amongst the developing nations. It has great significance for a country like India where majority of the population, around 68% of the people live in rural areas. He also compared the growth of villages in western countries and present scenario of India. He pointed out that, Gujarat is experiencing changing characteristic of villages with growing population and pointed out that people are migrating from rural areas to urban areas not only for employment opportunities but also for good standard of living and better facilities, to reduce this pressure Vishwakarma Yojana is finest approach.



He addressed students that with consultation of Local revenue authorities, TDO, DDO & most importantly village dwellers the future need of the village keeping in mind the need of days, future targeted population growth, growth of surrounding town or Taluka places etc., a development plan of the village ready to execute is required to be prepared under this project as targeted outcome at end. He informed all the students that coordination of all the Government Agencies were with us in Phase-I and II, it would be with us in Phase-III. Indeed this project will help all the youth engineers to find the lacuna from existing development and use their technical knowhow for effective development stated by him. He also addressed students for different workshop and Training Program will be planned to help students for the technical guidance by GTU.

He has highly indented to Gujarat Technological University, for providing us such an opportunity to work under Vishwakarma Yojana to get real work experience and applying our technical knowledge in the development of Villages. He expressed his deep sense of gratitude to Dr. Akshai Agrawal, Hon'ble Vice Chancellor, Gujarat Technological University-Ahmedabad for his encouragement and support during project work.



Orientation Program of Vishwakarma Yojana: Phase-III

Dr F. S. Umrigar addressed participants with the concept of Hon'ble vice chancellor Dr Akshai Agrawal that providing all urban amenities that city may have but keeping the rural soul in it. He acknowledged efforts, support and motivation of Dr Akshai



Aggarwal, Hon'ble vice chancellor for making GTU innovative with such kind of live study projects. He encouraged students by saying that service to development of villages will be best contribution to the country, community and culture. He mentioned that as young technocrat, it's our responsibility to build strong Nation.

Prof. L. B. Zala informed students that Vishwakarma Yojana is good opportunity for them to show their talent and knowledge. He added that already PG students of BVM Engineering college have already worked in phase-I & II, they had great learning experience. He requested students to complete project within time period with all hard work, efforts and team work. He thanked Hon'ble Vice chancellor - GTU & Dr. Indrajit Patel for bringing such opportunity for the students.

Prof. Bhaskar Bhatt, Nodal officer, SCET, Surat requested students to showcase their approach for effectual development of village. He explained students that hurdles will come in the path but facing the problems and finding the solution can make this project huge success. He acknowledged efforts put by Team of Vishwakarma Yojana and initiatives.

Technical Session:

Mrs. 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



Orientation Program of Vishwakarma Yojana: Phase-III

- 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.



Orientation Program of Vishwakarma Yojana: Phase-III

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 clientele 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 prerequisites 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.





Orientation Program of Vishwakarma Yojana Phase

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.



Orientation Program of Vishwakarma Yojana: Phase-III



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 presentation, Students and nodal officers asked the 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.



Energy Audit

Sustainable Solutions:



Waste Management

At the end, Mrs. Jagruti Shah has highly indented to Gujarat Technological University, Ahmedabad for providing us such opportunity to work under Vishwakarma Yojana. She expressed his 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, Principal and staff of BVM Engineering College, 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



List of Colleges attended orientation programme at BVM engineering College, VV Ngar

Sr. No.	Name of the Institute	No. of students attended	Institute	Name of the Taluka & District where your respective Institute Situated
1	B & B Institute of Technology	19	Polytechnic (Diploma)	Anand
2	Dr. S.& S.S.Ghandhy College of Engg. & Tech.,Majura Gate,SURAT	20	Polytechnic (Diploma)	Surat
3	Government Polytechnic, Godhra	14	Polytechnic (Diploma)	Godhra, Dist. Panchmahals
4	G.P. CHHOTAUDEPUR	08	Polytechnic (Diploma)	CHHOTAUDEPUR
5	Government Polytechnic,Valsad	19	Polytechnic (Diploma)	Taluka : dharampur,
6	Parul Institute of Engineering & Technology- Diploma Studies	16	Polytechnic (Diploma)	Waghodia, Vadodara.
7	Parul Polytechnic Institute	16	Polytechnic (Diploma)	Vadodara
8	Sigma Polytechnic (RMS)	14	Polytechnic (Diploma)	Vadodara
9	BVPIT (D.S.), Umrah	10	Polytechnic (Diploma)	Bardoli, Surat
10	A D Patel Institute of Technology	17	Engineering College (Degree)	Anand
11	Babaria Institute of Technology	12	Engineering College (Degree)	Vadodara
12	Bhagwan Mahavir College Of Engineering And Technology	17	Engineering College (Degree)	SURAT
13	BVM Engineering College	40	Engineering College (Degree)	Anand



Orientation Program of Vishwakarma Yojana: Phase-III

14	C.K.Pithawalla College of Engineering & Technology	23	Engineering College (Degree)	Tal.-Choryasi, Dist.- Surat
15	GEC, Valsad	18	Engineering College (Degree)	(Chikhli- DI-Navsari) (Valsad, Dharpur kaprada- DI-Valsad)
16	Dr. S & S S Ghandhy Government Engineering College, Surat	22	Engineering College (Degree)	District : Surat
17	Mahatma Gandhi Institute Of Technical Education & Research Center, Navsari	04	Engineering College (Degree)	NAVSARI &NAVSARI
18	Sarvajanik College of Engineering	14	Engineering College (Degree)	Surat District
19	S.N.P.I.T&R.C,Umrakh, Bardoli.	06	Engineering College (Degree)	BARDOLI, SURAT DIST.
20	Engineering College Tuwa, Godhra	16	Engineering College (Degree)	Ta-Godhra &Dist-Panchmahals
21	Government Engineering College,Godhra	22	Engineering College (Degree)	Panchmahal
22	SSASIT, Surat	32	Engineering College (Degree)	SURAT
23	Laxmi Institute of Technology	29	Engineering College (Degree)	Umergoan, Valsad
24	Gp, Vyara	11	Polytechnic (Diploma)	Vyara
25	Mahavir Swami College Of Engineering And Technology	05	Engineering College (Degree)	Surat
26	Pacific College	15	Engineering College (Degree)	Surat