

# **Gujarat Technological University**

**Ahmedabad, Gujarat**

**Orientation program of Vishwakarma Yojana**

**(23<sup>rd</sup> February, 2013)**

Gujarat Technological University organized a one day Orientation Programme of Vishwakarma Yojana held on 23<sup>rd</sup> February, 2013 at 10:00 a.m. at the Auditorium Hall of Gujarat Technological University, Gandhinagar Campus.

## **Inaugural Session**

Function was chaired by Hon'ble Vice Chancellor Dr. Akshai Aggarwal, GTU. Honorary Director Vishwakarma Yojana Dr. Indrajit Patel, Ms. Usha Banker-OSD, Ms. Jagruti Shah-Urban Planner and coordinator V Y Project GTU, 38 Government Officers including District Development Officers, Taluka Development Officers, Sarpanch from different villages and Principals, 16 Nodal Officers and 83 students from different institutions were attended the program. The program included inaugural function followed by three technical sessions covering infrastructure and construction field, water and waste water system design and use of green technology in context to Rurban development.

Ms. Usha Banker welcomed all and briefed about the successful completion of implementation of Vishwakarma yojana phase I. Hon'ble Vice Chancellor Dr. Akshai Aggarwal, Dr. Indrajit Patel, Dr. Krupesh A. Chauhan, Dr. Rawal (RCTI), Mr. Buch Deputy DDO, BK and Er. Harshal Parikh inaugurated the programme by lighting the lamp.

Dr. Indrajit Patel briefed all about progress of Vishwakarma Yojana stepwise ; objectives , features, planning, present status, work to be done during current phase, modality of project in context to rural development , role of educational institutions , Government and revenue officer and the possible inclusion of professionals. He also explained the possible involvement of MBA and M Tech students in this project for Socio-Economic and technical assistance. He briefed the gathering about overall scenario of work covering 85 villages from 25 districts as pilot project and inclusion of 220 more villages in second phase. Dr Patel appreciated initiative and

commitment of student nodal officers and DDO office for timely cooperation and guidance. It is aimed to complete ready to execute document by June-2013 and the entire participant and sincerely thanked all stake holders and contributors for timely support and guidance.

Hon'ble Vice chancellor Dr. Akshai Aggarwal welcomes to all. He appreciated efforts of Students and Nodal officer of Vishwakarma Yojana. He also insisted work necessity of field work for engineering students to have practical knowledge in the field. He illustrated the position of villages during 16<sup>th</sup> century to 18<sup>th</sup> century and now in 21<sup>st</sup> century in context to wealth development and potentiality. He narrated the example of counties and villages in European countries particularly England with reference to preserved culture and needed modern facilities competent enough referred to town. Dr Aggarwal presented his views and worries with potential guideline to students and faculties at large for this challenging task take by GTU. He address the situation of Indian institutions and University in the era of Globalization and vision of GTU with briefing various projects taken up by different department of university and expressed his feelings to make our university a world class.

Mr .Buch Deputy District Development Officer of District Banaskantha remained present and shared his knowledge of Rurban development with participants. He briefed the different scheme of state and central Government for rural development in terms of health education and infrastructure. He appreciated the role of student faculties and GTU at large for supporting their departments.

Mrs. Jagruti Shah, Project Coordinator gave brief detail about Technical session of orientation program. Orientation program has been grouped in three sessions as below:

- I) Core infrastructure planning for Rurban Development : Dr K A Chauhan Professor and consultant SVNIT .Surat
- II) Adopting Green Technology for Rurban Development : ArRajanRaval Architect and Professor CEPT Ahmedabad
- III) Water resource planning for Rurban development : Er Harshal Parikh VMS Ahmedabad

## **Technical Session-I**

Mrs. Jagruti Shah, Project Coordinator has initiated technical sessions. She has given brief introduction about first expert **Dr. Krupesh A. Chauhan**, In charge head of PG section of Urban planning, professor in charge in Road network & landscaping in Sardar Vallabhbhai national Institute of Technology (SVNIT), Surat. His brief Biodata has been enclosed in Annexure-I.

Dr. K.A.Chauhan presented brief about all infrastructure facilities in which he discussed about various Physical and Social Infrastructure facilities. He also given Meaning of Na-Ga-Ra(Town) where Na stands for Nal (Water), Ga stands for Gatar (Drainage), Ra stands for Rasta (Road). If these three facilities have been successfully provided by governance than development of village is 100%possible. He also presented importance of water. As per norms all villagers should be given 70lpcd (liter per capita per day) water in a day which is minimum criteria though some of our villages got only 20-30lpcd water. He also discussed various case studies related to it. He addressed various issues in providing infrastructure facilities in villages. On a global basis, fresh water is increasingly scarce resource. It is partially caused by increasing population coupled by change of consumption pattern and climate changes. He also discussed Factors affecting rate of Water demand like Size and type of community Standard of living, Climatic condition, Quality of water, Pressure in supply, System of supply, Sewerage, Metering, Water rates, Age of community, Back yard watering and other. He has also presented practical example of demand and supply of water, how to calculate pump design and other related data for the same. He said that the goal of National Rural Drinking Water Programme is “To provide every rural person with safe water for drinking, cooking and other domestic basic needs on a sustainable basis. This basic requirement should meet certain minimum water quality standards and be readily and conveniently accessible at all times and in all situations.” He has also given solution in the form of Ecological Sanitation which is decentralized sanitation system that understands human excreta, organic wastes and wastewater as a resource (not as a waste) with high potential for reuse and recycling. EcoSan systems enable a complete recovery of nutrients in household wastewater and their reuse in agriculture. They also help preserve soil fertility and safeguard long-term food security. Moreover, they minimize the consumption and pollution of water resources. He also given concept of sustainable planning for villages. In the end he said that village planning is nothing but planning for Space Arrangement for Peace.

In the end of technical session-I, few of village officers asked their issues of planning to expert and discussion for the same. Dr. Indrajit Patel thanked Dr. Krupesh A. Chauhan on behalf of Gujarat Technological University and offered memento.

Power Presentation of **Dr. Krupesh A. Chauhan:**[Core Infrastructure Planning for Villages Technical](#)

Session chaired by Dr M N Patel Director GTU and expert talked delivered by **Prof. Rajan Rawal**, faculty member and graduate office coordinator at CEPT University. He is currently engaged in the designing and constructing one of the early 'Net/near zero energy' building in India. His brief bio-data is been enclosed in Annexure-II.

Prof. Rajan Rawal started his presentation with the concept of energy. He presented importance of energy in world. He also explained importance of energy for mankind and for structure. While constructing structure one gives importance to man power, material, money, machinery and management of work. But if one start thinking for energy management for structure, can secure future of the world.

Different option to solve these issues has been presented for the same. Different kinds of changes like design of window, ventilators and orientation of structure can solve energy issues. Advance Technologies like LED, Pipe tube, LED lights and other can save maximum energy. He has also discussed some live case studies of energy utilizations. He also explained Zero energy building concept. Some of government officers and students asked question for the same topic in the end of presentation.

Dr. Indrajit Patel thanked Mr. Rajan Rawal on behalf of Gujarat Technological University.

Dr. M.N.Patel, Principal, LDCE, Ahmedabad has given memento on behalf of GTU. At the same time Dr. M.N.Patel congratulated all the students and colleges for their efforts in Vishwakarma Yojna and wished the program a grand success.

### **Technical Session-III**

Post Lunch, Jagruti Shah initiated Technical Session-III by giving brief introduction of expert **Mr. Harshal Parikh** Working as "Associate" for Infrastructure Services (Water, Plumbing, and

Environment& Infrastructure Development) with VMS Engineering & Design Services (P) Ltd. Ahmedabad. His brief bio-data has been enclosed in Annexure-III

Mr. Harshal Parikh presented network Design for Water Supply, Sewage, Waste water, Storm Water & Rain Water Harvesting for Rurban areas for Water resource planning. He has presented all the design parameters for the planning of water distribution network, sewage network planning and mainly rain water harvesting system for village planning. He explained calculation part of demand, supply, peak factors and other designing parameters. He has given all the norms as per National Building Code (NBC) which will helpful in designing Infrastructure facilities. He has also explained various standard formulas, Graphs and tables and their using while designing these facilities. His presentation has been guidelines to all the students for designing Water Supply, Sewage, Waste water, Storm Water & Rain Water Harvesting for Rurban areas for Water resource planning. he also presented some live case studies , advance technologies to reduce cost, manpower, land and other which is easy to occupy by villages. He also given good options for rain water harvesting system which is must for water resource planning. Students asked their issues while designing these facilities in the end of the session and discussed the same with him.

Dr. Indrajit Patel thanked Mr. Harshal Parikh on behalf of Gujarat Technological University and offered him Memento.

Power point Presentation Of **Mr. Harshal Parikh:**[Water Resource Planning for Villages](#)

### **Brain Storming Session**

Eventually Mrs. Jagruti Shah, Project Coordinator briefed about design phase to students, Nodal Officers, and Village Representatives. Also she initiated with panel discussion, for the same five group is been formed which includes Ahmedabad district, Gandhinagar District, Sabarkantha District, Banaskantha District and Mehsana District. Students of each group with their village representative and nodal officers discussed their issue with Mrs. Jagruti shah and Revenue officers of respective district. She has given various solutions to their issues and difficulties and also given guidelines for designing part. Panel discussion was very much helpful to students as

well as village representatives to share their view and issues phasing by villages which can be resolved in designing part by students.

Dr. Indrajit Patel and Mrs. Jagruti Shah thanked all the TDO, DDO, Sarpanch, Talaties, Government representatives, Students, Nodal officers and Staff of GTU for making orientation program success for Vishwakarma Yojna.

Photos of orientation of Vishwakarma Yojana attached herewith:



**Registration Desk**



**Inaugural Session**



**Government official, experts and Students**



**Address by Honorary Director Dr. Indrajit Patel**



**Presentation By: Dr. Krupesh A. Chauhan**



**Interactive Session with Deputy Director Banaskatha**



**Interactive session with Ms. Jagruti Shah-Urban Planner and coordinator Vishwakarma Yojana Project GTU.**

**Thank You.**