





## CENTRAL UNIVERSITY OF GUJARAT

### AISHE: U-0126

Central University of Gujarat has adopted five villages (Kaka Nu Tarapur, Titoda, Adraj Moti Pundrasan, and Lekhawara) near Gandhinagar district under Unnat Bharat Abhiyan. Different societal and environmental activities are going on.

- Base line Survey
- Identification of Key issue
- Participatory planning (People's priority- local solutions - selection of intervention)

CUG has completed Village / household level survey for one village and for other villages it going on.

Key issue already identified and after participatory planning (People's priority- local solutions - selection of intervention) the projects were submitted and got acceptance for implementation of solution with funding. Project formulation in two area:

- **Sustainable Agriculture System** Groundwater treatment and purification using solar distillation System in Kakanu- Tarapur village, Gujarat (Rs 50,000/)
- **Water Resource Management** - CETP-solid waste treatment and its conversion into biofertilizer (Rs 80,000)

Other activities during the different events like 5<sup>th</sup> June (Environment day celebration, Swachhta pakhwara week in village, Environmental awareness programme is organised time to time.

#### Future plans

- ✓ Participation in School Education
- ✓ Curriculum Reforms and Educational Institutions Social Responsibility
- ✓ Biodiversity conservation and management - People participation in eco village development.
- ✓ Conservation and restoration of Water Bodies by Rain Water Harvesting and Water Management.
- ✓ Utilization of biotechnology for remediation of wastewater pollutant for its Reusability.
- ✓ Plantation
- ✓ Environmental Awareness programme
- ✓ Skill development programme at school level and for youth

### **Extension activities under Unnat Bharat Abhiyan (UBA):**

University is participating in UBA and facilitating the Social and Environmental awareness in five villages (KakaNuTarapur; Lekawada; Titoda; Pundrasan; Adraj Moti) near Gandhinagar district. Faculty and students are involved in different activities organized by UBA, CUG team. Scientific interventions and implementation are also a major task at village level to solve social and Environmental issues. Students have completed their PG dissertation based on the different social and environmental aspect to understand social responsibility. CUG is encouraging to actively participation of students in different activities under UBA. CUG- UBA is also involved in technology development and technology customization at village level societal uplift.

### **Social activities and planning for village development**

Group of faculty members and students visited selected villages and interacted with Village Sarpanch, Talati, School principals, students and other people to understand village ecosystem and different issues to find out scientific solution. Also discussed the developmental activities to be introduces in the village to facilitate with the help of University students and faculties.



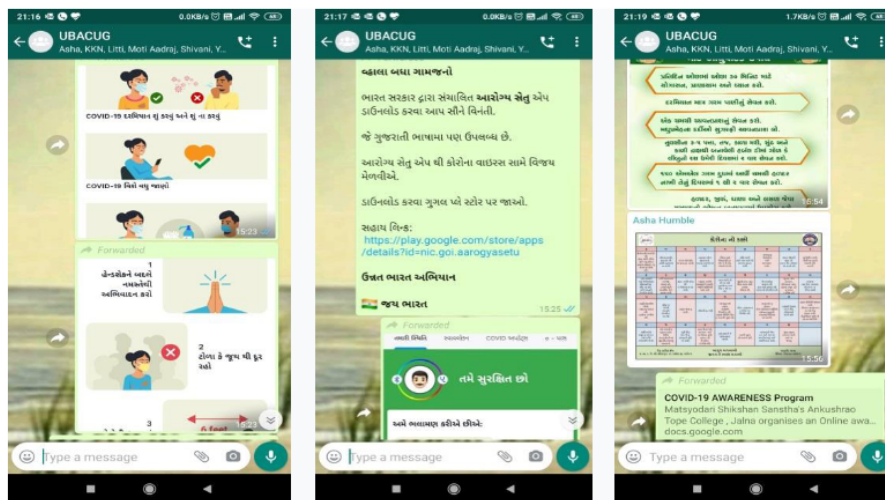
Village survey at Titoda; Meeting with Talati and interaction with school principle and students at Adraj moti village

### **Environmental awareness and technological implementation activities:**

In continuation of the technology transfer from lab to land - Two projects got selected under two different categories for (i) Technology Demonstration projects & (ii) Technology Customization projects. Project implementation is in process.

### Activities done in the crisis hour of COVID19:

1. Creation of WhatsApp group (UBACUG) including Sarpanch, Talati, few senior people from the village, School Principal, University faculty and students.
2. All the information was shared with the group time to time to spread the awareness and to get benefitted in response to Covid - 19.
3. Interaction and discussion with Sarpanch and school principal was done to share the information how villagers are coping during the lockdown period and also different information related to Covid 19 about awareness, measures etc. Group members shared in the group and Sarpanch forwarded the same among villagers.



### Awareness levels in the village:

Village people are aware about the COVID-19 and taking necessary actions to prevent the COVID-19. The following measures have been taken by the villagers:

- Village people are very much aware about lockdown rules and they are following the same strictly. Intra movement is also restricted.
- Farming is as usual; they are doing with laborers (from the same village only) following social distancing strictly.
- Major part of the day's schedule of a villager is farming and livestock caring. These are given priority & importance. They believe that COVID-19 will not attack as they are working in sun for farming purposes.

- They are making decoction (Tulsi leaves, black pepper, ginger, haldi, long, pudina leaves in water every day - Twice a day)
- They have made fencing at village boundaries so that no other outsider can enter into the village without Sarpanch's permission.
- Those who used to go to nearby market for selling the vegetables they are also not allowed to go to the market but one person visit the village and collect the vegetable from them.
- People are working in the farm daily as they believe that this COVID-19 gets killed at high temperature
- In villages all the entry gates are blocked, connected to the main rod that passes through village except one which allows only for medical emergency and food emergency.
- The gates of village blocked by the heavy vehicles.



- Gram Panchayat has also issued notice for all the villagers' regarding the penalty, if anyone breaks the lockdown rules.
- A team of Youngster from villages explained village people about COVID 19 and measures, also the importance of lockdown and other guidelines released by government in their local language so people can understand it better.
- Gram Panchayat sanitized the whole village under the Sarpanch's supervision.


#### **Challenges posed by COVID- 19:**

**Availability of water and hygiene practices:** Basic hygiene-related habits, access to water supply and sanitation are a major challenge. Regular hand washing for 20 seconds is the recommended protection against the threat of infection however the fresh water scarcity is there and hence regular hand washes is not getting implemented.

**Online education during COVID 19:** Online lessons / tutorials are helping educational institutions around India to beat the Covid-19 lockdown. At villages, students struggle with the internet speed or many of students below class 8<sup>th</sup> and not doing education activity as they don't have smart phone or internet facilities.

### Coronavirus disease Awareness online quiz programme to sensitize and increase awareness about COVID-19

Url - <https://forms.gle/NK76AR7GQKdds6uv5>



[CUG COVID Awareness Quiz](#)

Central University of Gujarat, Unnat Bharat Abhiyan (CUG-UBA) is organizing Coronavirus Disease Awareness online quiz programme aimed to sensitize and increase awareness about COVID-19. An e certificate will be issued through e-mail.

\*Required

Email address \*

Verify email

forms.gle

### Awareness Programme by CUG- UBA team in adopted villages

CUG- UBA team visited the three villages on Friday (2/05/2020) and met with village Sarpanch and other persons. Members of CUG team interacted with the villagers related to various aspects of coronavirus issues and explained the villagers about the safety and precautionary measures to be undertaken to contain the spread of coronavirus. All villagers very patiently cooperated with the team members.

UBA- CUG coordinator circulated **Coronavirus Disease (COVID -19) Awareness** brochure which was prepared by CUG. The team members demonstrated the youth the art of preparing Mask at home and also advised the youth to have a WhatsApp group where everyone could share the information. It was observed that villages level Sarpanch was doing his best by



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keeping constant vigil on the residents to stay at home and to follow in letter and spirit the guidelines issued by the government from time to time.

CUG Vice Chancellor, Honourable Prof. Rama Shankar Dubey appreciated the CUG- UBA activities and motivated the team.



### **Webinar on Atma Nirbhar Bharat - Prospects and opportunities in Rural Ecosystem Through – Microsoft team (22 July 2020)**

The Central University of Gujarat, Gandhinagar organised a panel discussion under the aegis of the Unnat Bharat Abhiyan, a flagship programme of MHRD at Central University of Gujarat and deliberated on a very pertinent and promising theme of *Atma Nirbhar Bharat – Prospects and Opportunities in Rural Ecosystem* on July 22, 2020 through a webinar. Bhawna Pathak, Dean, School of Environment and Sustainable Development & Co-ordinator, Unnat Bharat Abhiyan at CUG, welcomed all and also gave a brief introduction to our esteemed speakers.

Prof. Rama Shanker Dubey, Vice Chancellor of Central University of Gujarat, emphasized on the fact how historically India was extremely self-sufficient, infact one of the most prosperous civilizations of the world. However, due to gradual invasions at various points in history there was a downfall. There was a point at which India was importing even rice and wheat for consumption. However, after Green Revolution and White Revolution in the country, India has now become exporters for various products and services again. A second wave of revolution in 1991 of Liberalisation, Privatization and Globalisation may have done good to gross productions but it dented the self-sufficient small economies of villages which were based on works of farmers, artisans, masons, metal smiths etc. Therefore, India needs to get back to natural methods of agriculture and other livelihoods. He also emphasised that the higher education institutions have a huge role to play in strengthening the backbone of the country, the rural India.

Prof. VK Srivastava, Vice Chancellor Sankalchand Patel University, delivered his address on Scientific Innovation and Technology for Rural Development. He strongly suggested that for rural development, change should be more on qualitative terms than merely quantitative. He discussed various case studies on innovations in rural areas particularly for farmers. There is a strong need of knowledge creation and dissemination to reach the rural areas of India. He suggested that Atma Nirbhar Bharat solved various issues of the country and most important of them being employment.

Mr. Bharat Pathak, IFS (Retd.) former Director, State Institute of Rural Development addressed on Natural Resources and Social Entrepreneurship for Rural Development. He delved on the five pillars of Atma Nirbhar Bharat 1) Economy 2) Infrastructure 3) Systems 4) Vibrant Demography and 5) Demand. After sharing a brief profile of rural India, he said that rural India has abundant natural resources but severely lacks energy, infrastructure, and skills. Mr. Pathak explained the role of the Government and Higher education institutions in developing Social entrepreneurship through SHGs, Farmer Producers Companies, Producers Co-operatives, small group start-ups, Trading and Marketing Cooperatives.

Prof. Pranab Mohapatra, Professor, IIT Gandhinagar and Regional Co-ordinator UBA gave details about the concept and functioning of *Unnat Bharat Abhiyan* for village development. He elaborated on the advantages of the rural landscape and went on to add that the programme

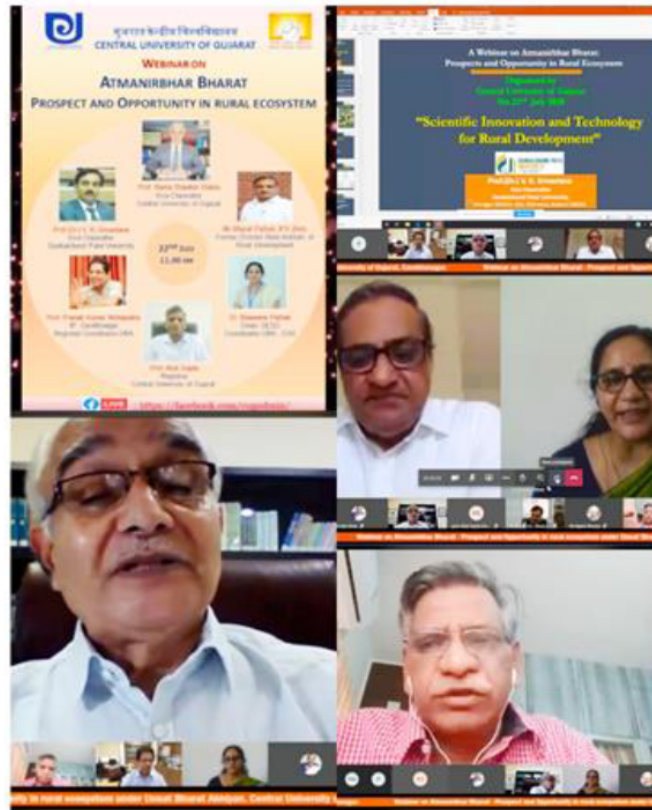


is all about working with the stakeholders through participatory methods. Such programmes

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are not only contributing to nation's development but also towards personal satisfaction for all those involved.

The Registrar of the University, Prof. Alok Kumar Gupta briefed about the contribution of CUG to UBA and how it could gradually lead to *Atma Nirbharta*. He gave his closing remarks on the entire panel discussion highlighting the future directions for UBA-CUG under the guidance of the Vice Chancellor. A formal vote of thanks was then proposed by Dr. Litty Denis, UBA team member and Assistant Professor at Centre for Studies in Social Management.



### Participation in Unnati Ki Kahani Chitro ki jubani

 Name of the Institute	Central University of Gujarat
AISHE Code	U-0126
	
Utilization of Rhizosphere Bioremediation technology for conversion of Barren land to Fertile land at Kaka Nu Tarapur, Gandhinagar	Rhizospheric Bioremediation-Technology that use plants to clean up contaminated sites: Field Experiment trial
	
Treatment of wastewater effluent from CETP, utilization through phytostabilization and reuse for irrigation	Technology transfer from Lab to Land under Unnat Bharat Abhiyan: Technology Demonstration and people participation for societal acceptance and implementations
Unnat Bharat Abhiyan	

### Participation in Conference/ Seminars/ workshops organised by UBA

1. Bhawana Pathak attended - Two-day National Workshop under Unnat Bharat Abhiyan at Inter-University Accelerator Centre (IUAC), New Delhi (21-22<sup>nd</sup> Jan 2020)
2. Bhawana Pathak attended - One day workshop under "UNNAT BHARAT ABHIYAN"-II at IIT Gandhinagar (7<sup>th</sup> Dec 2019)
3. Bhawana Pathak - Presented paper on Rhizoremediation of Pesticides from agro-ecosystem: Technology transfer from lab to land: A sustainable Approach in Tech4Seva- A three-day National Workshop on Technology outreach as an Enable for Inclusive & Sustainable Development organised by Unnat Bharat Abhiyan and Vijnana Bharati at IIT Delhi 10-12<sup>th</sup> Aug 2019.

### Academic curriculum Activity -

MSc dissertation submitted for PG degree based on the work under Unnat Bharat Abhiyan

#### 1. GROUNDWATER CHARACTERIZATION OF GANDHINAGAR AND DHOLERA AND TREATMENT WITH SOLAR DISTILLATION (KAKA-NU-TARAPUR)



Experimental trial with solar distillation

#### 2. Remediation of Chemical Fertilizer and assessment of characteristics changes in soil set-up at Kaka-Nu-Tarapur



Experimental Trial at agricultural field at selected village

#### 3. PEOPLE'S PERCEPTION ON CLIMATE CHANGE IN RURAL AREAS OF GANDHINAGAR



Questionnaire survey regarding people's perception at Selected village near gandhinagar under Unnat Bharat Abhiyan

Dr Bhawana Pathak  
CUG UBA - coordinator

