REPORT OF

ENTREPRENEURSHIP CAPACITY BUILDING CELL (E-CBC) ACTIVITIES DURING APRIL – DECEMBER 2023

Center: Government Science College, Vankal

Ta: Mangrol, Dist: Surat









Implemented by

Savli Technology and Business Incubator [STBI], Vadodara

Department of Science & Technology, Government of Gujarat

Powered by

Gujarat State Biotechnology Mission[GSBTM], Gandhinagar

Department of Science & Technology, Government of Gujarat

ABOUT COLLEGE

Located in the tribal region of South Gujarat, Government Science College, Vankal (GSC, Vankal) is one of the premier public funded colleges in the state of Gujarat. The College was established by the Department of Education, Government of Gujarat in the year 2012 to provide and promote quality education to the youth coming from underprivileged tribal communities.



The college is affiliated to Veer Narmad South Gujarat University, Surat. Since its inception, the college has been playing a pivotal role in bringing about a marked change in the erstwhile underdeveloped tribal region by enrolling around a 1000 students every academic year. Besides regular academics a number of training and skill development programs are regularly organized to enhance the competency of students.

The college has state of the art infrastructure and basic research facilities to promote all-round development of students. At present, the college boasts of its academic excellence with highly capable and dedicated faculties well versed and established in their respective disciplines and selected through GPSC.

ABOUT THE E-CBC CENTRE: GOVERNMENT SCIECNE COLLEGE, VANKAL

Government Science College, Vankal has one the few Entrepreneurship Capacity Building Cells (E-CBCs) established by Gujarat State Biotechnology Mission (GSBTM) December 2022. One of the major challenges of Biotechnology-based start-ups is that they have longer gestation period and higher risk. Because of this very few young innovators especially students come up with biotechnology based start-up ideas. If proper incubation support including financial, mentoring and laboratory infrastructure support is provided to young iedators wherein they can test the viability of their ideas is provided, they can come up with good start-up in biotechnology sector too. To encourage the start-up ideas in biotechnology sector, GSBTM has taken this initiative to establish biotechnology incubators at different educational institutes spread across different regions of Gujarat. The role of the cell is to provide mentoring, incubation, financial and infrastructure support to budding startups in the field of biotechnology. Establishment of a biotechnology based E-CBC in college located in tribal region like ours will play a crucial role not only in boosting the confidence of tribal students towards business opportunities in biotechnology but will also help in fostering development, empowerment, and sustainability.

Establishment of Biotechnology Entrepreneurship Capacity Building Cell at Government Science College, Vankal will foster

- 1. **Entrepreneurship and innovation** in biotechnology sector among trial communities. Incubation centers create a conducive environment for innovation and entrepreneurship, encouraging the establishment of biotech startups in tribal regions. Incubation centers can felicitate use of biotechnology knowledge and skills for solving local problems.
- 2. **Skill development and capacity building** in tribal students pursuing life science subjects. Training programs and workshops organized by E-CBC center can help to educate tribal students and up skill them with modern technologies.
- 3. **Preservation of indigenous knowledge** and its application using modern tools of biotechnology
- 4. **Social inclusion and empowerment:** The presence of biotechnology incubation centers promotes inclusivity by ensuring that tribal communities have access to opportunities in the growing biotech industry. Tribal individuals are empowered to leverage their unique resources and traditional knowledge in the biotechnology sector, fostering a sense of pride and self-sufficiency.
- 5. **Sustainable development** using biotechnology wherein Biotechnology can be employed for sustainable agricultural practices, waste management, and environmental monitoring, contributing to the overall sustainable development of tribal regions
- 6. Job creation and income generation thus leading to economic development. E-CBC can help to generate employment opportunities by nurturing local talent and entrepreneurs in the biotechnology sector. This can contribute to reducing unemployment rates in tribal regions. The establishment of biotech businesses can lead to increased income for individuals and communities, thereby enhancing the overall economic well-being of tribal areas.

Activities carried out by E-CBC at Government Science College, Vankal:

1. Innovation and Incubation activities: Immediately after it's established in December 2022, in January 2023 the E-CBC at GSC, Vankal announced call for proposals from young student biotechnology indeators and innovators. To familiarize students towards this cell, student sensitization seminars were conducted in the college for all students pursuing their undergraduate program.



The center received fourteen proposals for financial and incubation support. The list of the proposals received are provided in table 1. These proposals were initially scrutinized (0th screening) for suitability and feasibility by the institutional screening committee. Out of the fourteen proposals except for one proposal which was not related to biotechnology, all other proposals were passed and were selected for **idea pitching** before a panel of experts from GSBTM and STBI for funding and support.

Table 1: List of projects under E-CBC GSC, Vankal for preliminary screening

S.No.	Name of Applicant	Mobile No	Project
1.	Mandar Shirish Dixit	9975299504	Curd maker
2.	Devyani B Chaudhari	8758886444	Chlorophyll water
3.	Khushbu Hasmukhbhai Patel	6353891496	Development of Model Root Culture System
4.	Chaudhari Shrujal Dilipbhai	8238676528	Environmental pollution caused by synthetic dyes
5.	Monaliben Sangdot	9099448351	Biocontrol for eutrophied water bodies
6.	Gamit Nilaykumar Sajjanbhai	9512686235	Post-harvest Management Strategy
7.	Ruchi Maheshbhai Patel	9586426617	Development and production of secondary metabolites via different elicitors
8.	Artiben Bhikhubhai Chaudhari	7874393137	Menstrual cramp reliever formulation
9.	Jaydeep Chaudhari	8238737396	Vegetarian Chitosan Tablets
10.	Balram Kishor singh	7677733145	Sucrose alternate from Stevia
11.	Ahmed Shabbir Savani	7878949702	Personalized Bhasma; Nanomedicine in Ayurveda in the terms of safety and efficacy
12.	Atodariya	9313668279	Drug for Migraine
	Bunha Hemangi Kanubhai	8780156366	Herbal Cosmetics.
14.	Kosamia Zanvikumari Ketansinh	-	Gas leak Detection Device

After the idea pitching, three out of the thirteen proposals were selected for funding and incubation support. The details of the innovators, their project and funding support provided are as follows.

Details of innovators and ideas being incubated at GSC, Vankal

1. Name of Ideator: Khushbu H. Patel

Domain: Plant Biotechnology/Agricultural Biotechnology

Title of Project: Development of Model Root Culture System: "The Root Factories"

Budget Sanctioned: 3.0 Lakhs



Dr. Khushbu Patel has completed bachelors and masters from Department of Biotechnology, Veer Narmad South Gujarat University, Surat. She has done dissertation work in the field of Plant Tissue culture and also has training in this field and 5 years of experience in the same.

2. Name of Ideator: Jaydeep Chaudhari

Domain: Neutraceuticals

Title of Project: Chitosan Tablets from Mushrooms

Budget Sanctioned: 2.5 Lakhs

Mr. Jaydeep Chaudhari has just completed his undergraduate degree in microbiology from Government Science College, Vankal. He has the passion of business and want to convert his knowledge in microbiology and biotechnology into successful entrepreneurial venture. He is interested in trying new thing and exploring the possibility of converting innovative ideas in the field of life sciences to commercial success. He sees a good opportunity in exploiting chitosan, a waste of seafood industry, to high end products.

3. Name of Ideator: Ahmed Shabbir Savani

Domain: Nanotechnology/Ayurvedic preparation

Title of Project: Personalized Bhasma; Nanomedicine in Ayurveda

Budget Sanctioned: 3.5 Lakhs



Dr. Ahmed Savani, MD Ayurveda Scholar @ GMARC Goa. He has completed BAMS Graduation in 2019 along with an internship from Shri O.H Nazar Ayurveda College, Surat, Gujarat; Gujarat Ayurveda University Jamnagar. He has recently completed CRAV - RSBK, 1 year Certificate Fellowship Course of

Rashtriya Ayurveda Vidyapeeth New Delhi from Punarvasu Aushadhshala Pune in Rasashastra & Bhaishajya Kalpana ~ Pharmacy. He has clinical practice experience of more than 2 years.

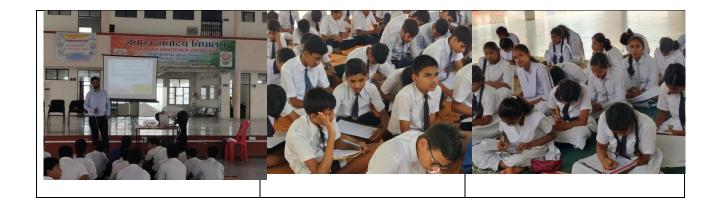
2. Student Sensitization activities:

Two student sensitization activities were conducted by the E-CBC of Government Science College, Vankal. In the first **student sensitization activity** the student of the college were sensitized towards entrepreneurship and innovation by means of lecture seminar. The event was organized on 25th July 2023. Total 215 students across disciplines participated in this seminar.



Second **student sensitization seminar** on the topic "Entrepreneurship: A Great Career Opportunity" was organized by the E-CBC cell for school students of Jawahar Navodaya Vidhalaya on 26th July 2023. The seminar was followed by an "Idea Hackethon" in which students were asked to come up with innovative solutions to different problems faced by people in daily lives. Total 100 students of classes IX and X participated in this event.





To inculcate entrepreneurial mindset in students the E-CBC of GSC Vankal in association with the Zoology department organized hands on **workshop on honey bee keeping** and interaction with successful entrepreneur, Mr. Ashok Patel. Dr. Jayesh Pastagia, Head of Entomology Department, College of Agriculture, Waghai has presided over the event as chief guest and key note speaker. He highlighted the various entrepreneurial opportunities present in the bee keeping sector. He also explained the intricacies of bee keeping business and government support for the same. Total 150 students participated in this event and gained knowledge.



Twenty four students of GSC Vankal who exhibited interest in entrepreneurship as career, were provided with **training (40 hrs) in Entrepreneurship Development** in association with NSIC, Rajkot.



The E-CBC at Government Science College, Vankal is thus actively functioning to propagate entrepreneurship among students by arranging different seminars, workshops, training programmes and ideathons. It is also providing necessary infrastructure, mentoring and incubation support to budding biotechnopreneurs.

The E-CBC of GSC Vankal is extremely thankful to GSBTM and STBI, Vadodara for their support and guidance.

Dr. Anil Kumar Singh,

Coordinator, E-CBC,

Government Science College, Vankal