

Vigyan Ashram Status Report

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A] Independence Day & Ganesh festival celebration:

15 August Independence Day was celebrated with all Josh of celebration. Though we are missing students on campus due to pandemic. Participation by all Staff and DIC fellows made it a memorable day. There were cultural programs and sports activities. We had sport competition of relay race and underarm cricket matches. Cycle racing, limbu-chamcha (lemon spoon), Gunny sack racing were all fun.

We also celebrated Ganesh festival during 21st to 26th August. VA team prepared Ganesh idol, made a small decoration & traditional 'prasad' during the festival. Staff also performed Barchhi dance with traditional Dhol and Tasha. It was full of fun & stress busters for team members.



B] Entrepreneurship Development Program (EDP) :

During past 5 months, more than 500 + rural youth, SHG members reached us through social media campaign, webinars & online training support. Presently we are providing incubation & handholding support to selected youth. Though pandemic & economic slowdown is negatively impacting rural community, many youth are willing to stay back in their villages. We are guiding them in selecting right opportunity & prepare business plan.

Vishal & Ganesh visited Ahupe village (Tal-Ambegaon) on 7th Aug to survey skill training and livelihood needs of local youth. Ahupe is very remote village located at back water of Dhimbe dam. They are many reverse migrated youth in this village. We are planning to provide skill training & enterprise development support to these youth through local administration support.

PRAJ Foundation's support : Vigyan Ashram's long-time partner M/S Praj foundation joined our efforts. They have agreed to support project to provide enterprise incubation support to 40 rural enterprise per year.

Online EDP courses in this month

- A new batch of 'Renewable energy based EDP' online training has started from 18th August with 9 participants. This will be 5 weeks (20 to 25 Hrs) training module covering innovative technologies & business models developed by SELCO INDIA Foundation and others, technical aspects of solar PV calculations, installation and business management skills.
- 2nd batch of 'Food processing EDP' online training program was concluded on 31st August. We had trained 12 participants on different food preservation techniques & business opportunities. We are providing handholding support to these participants in required skill training, trial production & business plan preparation.

C] 'Heroes of the month' enterprise success story

- Tushar & Shubham Yede: Food processing technology based EDP training students started their 'Lakadi ghana' (wooden press) edible oil making unit at Kavathe Yamai. He is also undergoing training for developing 'low fat chikki' from by-products (oil cake) of his enterprise.
- Aditya Borade: Poultry farming EDP training student from Borade Mala (Shirur) started his advanced climatic control broiler farm with 4500 bird raring capacity. Aditya was facing lots of technical difficulties at his farm due to E.coli infection & higher water temperature, but he overcame them by getting technical support from VA team and earned a profit of Rs.30000 during August month.



Chikki Training

D] Training on establishing Kitchen garden (हरित पोषण घरघरी)

Training of 50 'Krushi Sakhi's' of Mahila Arthik Vikas Mahamandal (MAVIN) and around 45 individual participants / NGO representatives are in progress. They are learning scientific kitchen garden establishment skills through online training sessions in collaboration with STARs forum. In this month, 3 sessions were conducted to cover topics like selection of plants, vertical farming, fertilizer & water management.



Kitchen Garden

E] Fab School @ Mukhai school :

Fab School project activities are started at KRG Palande Ashramshala, Mukhai (Tal- Shirur, Dist- Pune). Project aims at creating a model of self-sufficient smart school camps by demonstrating innovative technologies in energy, water & waste management, agriculture. Project also aims at creating awareness among villagers for adopting these technologies for community places. On 23rd August, a project is formally started with survey visit to School campus. As school is closed due to COVID pandemic, we are conducting online training sessions to introduce smart technologies for school students. Project activity updates are available on -



VA team @ Mukhai

<http://vadic.vigyanashram.blog/category/la-foundation/>

F] Design Innovation Centre (DIC) & FAB academy updates:

- Under SELCO Foundation supported program, solar operated sewing machine & solar lighting system was installed at Mrs.Chandrakala Rokade (Loni, Tal-Ambegaon, Dist-Pune) and BBS Sanstha (Faloda, Tal-Ambegaon,, Dist-Pune) respectively. Solar sewing machine will help Mrs.Chandrakala to increase her sewing enterprise output, while BSS Sanstha using solar lighting unit in their 'food processing unit'.
- A commercial version of 'Solar Dome Dryer' was manufactured by M/S Auto-Gram industry, Bhosari (Pune). We are exploring possibility to partner with M/S Auto-Gram for becoming manufacturing partner for dome dryer technology. We will be testing its efficiency, modifications requirement & develop user SOP in the coming days.
- Amol, Tejas & Kalyani started setting up of new



Solar Lighting @ Falode village

terrace garden on DBRT boys hostel's terrace. Objective of this garden is to demonstrate 'urban terrace' farming model on 500 ft² area & collect yield and other relevant data for larger scale replication. Marathi Vigyan Parishad (MVP) is supporting this project activity.

- Agricultural bio-waste composting project : Sonal prepared 280 lit of composting culture (microbial consortium) for field trials. She had also installed 4 composting beds @ Karde, Ramling, Nivari village near shirur.
- Arun, Amol, Prasad, Kalyani visited 'waste plastic can recycling unit' of Social Seva Initiative (Katraj, Pune) on 29th August. DIC students are working on developing 'plastic can cleaning unit' for this social organization.
- New team members joined Design Innovation Centre (DIC) research fellowship program. They are assisting on-going research and defining 'problem statement' for their respective projects. Following are new team members & their projects –

| Name | Problem definition |
|-----------------|---|
| Kalyani Chavali | Designing & fabrication plastic cans cleaning unit for industry of Mr.Jayant Pai |
| Ameya Bondre | Quantifying non uniformities of climate control polyhouse |
| Soham Suntankar | Installing MBBR system for hydroponics of Pabal for converting Ammonia to Nitrate |
| Kalyani Shinde | Establishing & quantify feasibility of terrace garden at Pabal. |

G] DBRT course & Pabal Campus update:

DBRT 2020-21 batch is of 65 students from 5 different states. Students are getting acquainted with online training methodology. They are given 'hands on learning' assignment to do at home with available tools. During the month of August, we took 18 sessions and students learn skills like Chikki making, preparing land for vegetable plantation, basics of electricity & units of measurement. Their learning activities are documented on google classroom and whatsapp groups. Log & photographs of students learning are available on : - Activities of workshop department - <https://bit.ly/36gDzAm>, Agriculture department - <https://bit.ly/30fnBmb> , Home & Health department - <https://bit.ly/348AlfJ> , Electrical department- <https://bit.ly/2S5rINf>

Campus Activities :

Team of instructors & day scholars (non-residential students from Pabal) are working on their respective projects. Following are some of the highlights of their work -

- Energy & environment department fabricated 10 rain gauges for Kendurvillagers. A simple rain gauges of plastic cane & meter gauge costing Rs.100/ each are installed as part of 'जल साक्षरता' program with YASHADA (Pune) support.



Rain gauges made at ashram

- Asha-INDUSA : Ladies hostel recreation center : Workshop instructors and students completed fabrication of 225 sq ft shed on ladies hostel terrace. This terrace facility is of cooking desk, cloths washing, incinerator etc. Workshop team also repaired roof of DIC classroom toilet block. Old roof became unsafe due to rusting & erosion.



ASHA project : Toilet construction in progress

- Hydroponic system : Tejas & Ghansham designed, fabricated & installed a 'food & drain' based hydroponics vegetable cultivation system near kitchen . Aim is to improve 'Nutrient Film Technique (NFT)' hydroponics design for easy & effective nutrient mobilization in hydroponics vertical farming especially in urban terrace farming. System is capable of providing 2 to 3Kg green vegetables / month at its optimum production level. Agriculture team also harvested 30 Kg of fresh vegetables from kitchen garden & polyhouse.
- Animal husbandry dept output : 490 lit milk & 136 dozen of eggs.
- Home & health section : Moringa fortified ragi ladoo & de-oiled coconut cookies recipes were formulated & tested for feedback. They also prepared linseed-moringa fortified chikki (7 kg), dried fenugreek (1kg) as a part of DBRT online training demonstration.

H] IBT schools online training & classes:

Schools are closed due to pandemic. We have started online session for IBT schools. Students & instructors are participating enthusiastically in online classes & Do-It-Yourself activities at home. During the month of August, 8 sessions were conducted for 80 + instructors & 663 students from 22 IBT schools all over Maharashtra. Following are some of the highlights of their learning as



- Energy and Environment: Students from Chinchwad school prepared four LED light mala's of value Rs. 800/- and used them for Ganpati decoration.
- IBT students of Dhamari, Nande, Tathwade, Marunji schools prepared 20 'first aid' boxes for their homes & community places.
- Due to COVID pandemic, Govt has instructed to reduce school curriculum by 25%. Therefore, under the instructions from vocational dept, a committee of technical team from VA, IBT instructors, coordinators & Head Masters (HM) modified IBT curriculum for 2020-21 academic year.

IBT @ Chinchwad school under lockdown



Ladies hostel recreation center



Amboli school : Composting bed

I] Wikipedia publication & DIY Lab :

Wiki team worked on following articles as -

- A webinar on 'opportunities in open source web publication' was conducted on 27th August for 'Chaitnya' NGO (Rajgurunagar).
- Scanning and digitalizing of 5 books were completed for Khed (Rajgurunagar) library.
- Komal converted 4000+ pages to OCR from 17 different books. She also completed proof-reading of 600 pages of Ranade dictionary (रानडे इंग्रजी-मराठी शब्दकोश खंड पहिला (The Twentieth century English-



TATA CSR report 2019-20 mentions Vigyan Ashram's Wiki project

[Marathi Dictionary Volume 1\)](#)

- New wiki articles published - [रामनाथ गोएंका](#) , [जन गण मन](#) , [शिवराम हरी राजगुरु](#), [भारताचा राष्ट्रीय ध्वज](#).

J] Other tit-bit –

- Sachin attended the introductory week training of 'Education for Sustainable Development Leadership Program 2020' organized by 'Engagement Global, Germany' during 23rd to 28th August. This program is aimed at training and supporting young professionals to develop the knowledge, tool and competencies to implement projects that integrates Education for sustainable development into their work and exchange with international community of ESD Network across 4 countries. The program period is Mar 2020 to April 2021. The aim of the introductory week was to introduce the participants,

program objective and methodology. Total 20 mentees along with their mentors from India, Germany, Mexico and South Africa were participated.

- ii) TAP RISE (Technology Accelerator Platform) proposal finalization workshop was organised by Vigyan Ashram and Development Alternatives on 7th Aug.

Expert committee members, representatives of various technology accelerators participated in the meeting. It was recommended by the experts to start the activities of the platform at the earliest and take support from existing accelerators.



- iii) Yogesh & Suhas attended meeting on application of 'augmented reality' technology in skill training organized by SEED division of Department of Science & Technology (DST) on 18th August.
- iv) Yogesh participated as a Jury in Maharashtra Startup Week (MSW 2020) in Agriculture startup presentation panel on 5th Aug.
- v) Lead acid batteries of computer section were replaced with 15 batteries of 60Ah each.
- vi) Yogesh attended Expert Committee (EC) Meeting for TSP-TITE (Tribal Sub Plan-Technological Intervention for Tribal Empowerment)" on 24th & 25th August. He also attended orientation cum sensitization workshop on Monitoring and Evaluation as an expert on 13th Aug.
- vii) Dr. Ramkrushna Sonde (Executive vice president research, Technology & Innovation, Thermax limited) visited VA campus on 12th August and guided VA team on various aspects of 'Prototype to Product' development journey. Dr. Sonde is also helping us in developing urban kitchen gardening model in collaboration with Marathi Vigyan Parishad.
- viii) Weather record – Rainfall of the month -113.92 mm (Total – 391.83 mm) ,Max temp-38.00 °C, Min Temp –21.00 °C , Humidity – 96 % , Water height in well – 4.80 Mtr.
- ix) Energy consumption record- Electricity unit – III Phase -1069 units , I Phase Export- 550 units, Import- 453 units. DG used – 03.30 Hrs. Quality of power : Number of interruptions :57, Normal voltage : 89.13%, No supply : 3.15 % , low voltage : 7.35 % , No data: 0% (not received)
- x) Animal Husbandry section update – Milk production – 490Kg , Goat- Weight gain NA , Poultry Egg production – 136 dozens (FCR – 1.82)
- xi) Biogas consumption – Dung used- 177 Kg, Gas produced- 8.33 M³, Two wheeler record– NA
- xii) www.dsttara.org – 1126 (New visitor –973 Repeated- 153) , www.vigyanashram.com –1469 (New visitor – 1161 Repeated-308)

K] Data Report:

https://drive.google.com/file/d/1XBW7CKSNOWG_VPIBLRa90jJ9pPz0qGEu/view?usp=sharing

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Photo Gallery:



Cultural program on 15th Aug



Sports on 15th Aug



Fabrication of Evaporative cooler under trial



Ganesh festival at ashram



Vegetables for drying



Preparing compost culture

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