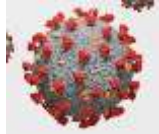


# Vigyan Ashram Status Report

Volume 38 Issue 04

April 2020

In this issue



## Vigyan Ashram Does not STOP !!

COVID pandemic is a challenge. Nation is under lockdown, Institutes were asked to close. Movements are restricted and supplies are stopped.

Still there are 35 students and staff staying on the campus during the lockdown. Rest of the students were sent back to their home. Some of our staff members are working from home. Collectively we have put our act together and started functioning under the changed situation. Team Vigyan Ashram tried to contribute in this fight against COVID with all its Strength.

This report is unusual because none of the activities were planned in advance. We are very optimistic that as a Society, we will overcome this challenge soon.

**We are thankful to all our partner for assuring us their support during this difficult period.**

### A] Face-shield for frontline COVID fighters

Team Vigyan Ashram has made over 7000+ face-shield using Laser cutting machine. It was supplied to hospitals, PHC workers, ASHA workers, Sanitation staff. We have used open source designs available from Fab Lab network. (<https://github.com/MakersAsylumIndia/Covid-19>).

We are thankful to DIC at Savitribai Phule Pune University (SPPU) and local government administration for providing us necessary material, logistic and Govt permissions.

- We have tried other available designs of face shields and made them & then finalize the design.
- We have conducted on-line training of DST core supported organizations on Making Face shields and masks. 16 NGOs across India participated in the webinar.
- We have prepared DIY instructions of making Face shields ( [shorturl.at/gGKN3](http://shorturl.at/gGKN3) ) and DIY video of making



i) PHC : Nimgaon Mhalunge ii) Fab Team iii) Latur Police using Mask iv) Team at work

face masks. It was shared widely with our student network and many adopted it. It was made by VA volunteer Mrs Anagha Dixit : <https://www.youtube.com/watch?v=EejZOBqXU9M>

- Dept of S&T (Govt of India) issued its Advisory for action for COVID response to NGOs supported under SEED division. They have suggested 'Vigyan Ashram' as a resource agency to help other NGOs in making face shields and masks.

## B] Advisories for Technicians

We have published work-place safety instructions for Poultry farmers, Vegetable vendor, Electricians, Dairy men, Welding – fabricators. It was circulated through social media sites. Initially, we have made posters in Marathi but on request from out of Maharashtra NGOs, we have published posters in Hindi language as well. We are thankful to Mr.Pramod Riswadkar for voluntary support in designing these posters.

## C] Innovation's During Lockdown :

DIC fellows under guidance of Dr.Dixit worked on various technology development projects on campus.

a) Disinfection chamber: A team of DIC design & fabricated 'disinfection chamber' for personal body sanitization. Apart from engineering fabrication & disinfectant spraying mechanism, DIC team did a reference study for effectiveness of common surface disinfectants like Sodium Hypochlorite (NaOCl) and Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>). It is found that H<sub>2</sub>O<sub>2</sub> has better efficiency with less side-effects on skin, so its selected for disinfection chamber. Chamber has been operational at campus for past 1 month. We have prepared its design manual, fabrication & protocol for use. It was shared online and used by many individuals & organization's. Documentation is available on : [shorturl.at/dAX56](http://shorturl.at/dAX56) Video : <https://www.youtube.com/watch?v=fAx0wVzdNbU>

b) DBRT team fabricated a pedal operated hand-wash dispenser & hand washing station at the entrance of the campus.

c) IBT team translated WHO manual for preparing hand sanitizer. We will be using it for training IBT school after the lockdown.

d) Aerosol box was made as per the open source Design and was supplied to Nobel Hospital against their order. This order was processed under lockdown with special permission from Police to procure the material and supply the machine to hospital.

COVID-19 विषाणू संसर्गाच्या धोक्यामध्ये आपल्या व्यवसायासंबंधी सूचनांचे पालन करा !



- १ आपण स्वतः पोल्ट्रीमध्ये काम करत असाल तर आपणाशिवाय दुसऱ्या कोणत्याही व्यक्तीला पोल्ट्रीमध्ये प्रवेश देऊ नये.
- २ पोल्ट्री मध्ये कामगार कामावर ठेवला असेल तर त्याला आपल्या पोल्ट्री व्यतिरिक्त कोठेऊ फिरो देऊ नये.
- ३ कंपनीचा डॉक्टर (पक्षी निरीक्षणासाठी आलेले व्यक्ती) निर्जंतुकीकरण द्रावण फवारून प्रवेश द्यावा.
- ४ पक्षांसाठी खाद्यापी गाडी आल्यास ती डेटॉल, झिटर्जंट पावडर, फोर्टीशियम परमँग्रेट च्या द्रावणाने फवारून शीट्टजतळ आणावी. खाद्य उतरून घेताना प्रत्येक गीण / पोते निर्जंतुकीकरण द्रावणाने फवारणी करावी किंवा १ तास उन्हात ठेवावे.
- ५ आपण खरेदी केलेली औषधे आणि इतर सर्व वस्तू निर्जंतुक कराव्यात. त्यामधील काही वस्तू तुम्ही उन्हामध्ये ठेऊ शकता.
- ६ पोल्ट्रीच्या बाहेर हलत धुण्यासाठी पाणी व साबण असल्याची खात्री करा आणि त्याचा वापर दिवसातून ४-५ वेळा करा.
- ७ घरी गेल्यावर सर्वात प्रथम आपले कपडे झिटर्जंट पावडरच्या पाण्यात बुडवा आणि त्यानंतर अंधोळ करा. (आपले कामाचे कपडे आणि इतर वापरातील कपडे वेगळे असले पाहिजेत.)



विज्ञान आश्रम | मु.पो. पाबळ, ता. शिरूर, जि. पुणे  
www.vigyanashram.com | +91 9730 005 025



Suhas delivering Aerosol box to Hospital

e) Terrace farming : Amol started experimenting to carry out Terrace farming on the terrace of hostel. He made 420 sq. feet experimental farm. He wishes to demonstrate concept of organic waste to soil to agricultural food. We believe COVID situation can generate interest among people to grow their own food.

f) Tejas learned to make water filter candles using BARC technologies. They made 25 candles. Most of the candles failed for expected performance in test, following proper dipping method and using casting solutions at proper time is required. Team is working to solve the issue.

#### **D] Education Does Not Stop :**

We have continued with educational activities by conducting online classes. We had given on-line assignments to students. We had used Jitsi, Zoom, Skype application extensively. Following are highlights of training :

#### **i] DBRT Online and On Campus Activities :**

We have 13 students on campus. They continued with hands on activities and projects on campus. Remaining students joined via Video conferencing lectures. We have started taking every day two classes for all students. Classes were conducted on Jitsi online platform. DBRT instructors conducted 42 online sessions for engineering (workshop), electrical (energy & environment), agriculture and food processing (home & health) section in the month of April. Team developed a content for these sessions in the form of PPT, videos etc along with post-session assignments.

Following work was done by students on campus during the month of April 2020.



Baman & Sunil constructed a walking path & planters for flower beds in DIC boys hostel.



Yash, Vishal & Rajesh took charge of dairy & goat farming section. They repainted cow shed & made drinking water arrangement for goats.





Students also did seed sowing for Bajara (6 kg) & Sun-hemp (15 Kg) in fodder plots.



Students made silage from 8000 kg of maize fodder. This silage will serve dairy & goat farm fodder requirement for next 4 to 5 months.



DBRT Girls students completed painting of DIC boys hostel building.



Teajs & Baman planted Okra & Guar crop in polyhouse.

### ii] Entrepreneurship Development Program for Youth returned to Villages :

Now many rural youth returned back to their villages, want to stay back after the lockdown. We have launched a social media campaign to identify such youth. So far 350+ individual showed interest to start their own enterprise.

In the month of April, we have organised two introductory sessions for them. It was followed by training on enterprise focussed training. Poultry farming (67 participants) on 20<sup>th</sup> April, Vegetable nursery (22 participants) enterprise on 20<sup>th</sup> & 29<sup>th</sup> April respectively. We have invited VA alumni entrepreneurs as a guest for the session. This was received very well by the participants. We are now starting detailed follow-up training for the enrolled students.

शहरातले धकाधकीचे जीवन आता परत  
नको रे बाबा! चला आपल्या गावातच  
व्यवसायाच्या नवीन संधी शोधू !  
'विज्ञान आश्रम' च्या उद्योजकता  
विकास कार्यक्रमात सहभागी होऊ !

इच्छुक युवकांनी whatsapp group मध्ये सहभागी होण्यासाठी  
comment मध्ये दिलेल्या link चा उपयोग करावा किंवा  
google form मध्ये आपली नोंदणी करावी.



**VIGYAN ASHRAM**

विज्ञान आश्रम आयोजित वेबिनार  
कुकुटपालन व्यवसायातील संधी  
आणि व्यवस्थापन महत्व

- कुकुटपालन व्यवसाय संधी व अर्थशास्त्र
- आधुनिक तंत्रज्ञान
- धोके आणि व्यवस्थापकीय उपाययोजना

वक्ते : श्री. गणेश पिगळे  
(विषय तज्ञ व पुणे येथील यशस्वी उद्योजक)

सहभागी होण्यासाठी code स्कॅन करा किंवा खालील नंबर वर  
whatsapp पाठवा

संपर्क : ९७३०५७०१५०

सोमवार २०/४/२० वेळ सकाळी ११:००



विज्ञान आश्रम आयोजित  
वेबिनार @  
**रोपवाटिका**


कमी खर्चातील शाश्वत व्यवसाय  
भाजीपाला . उस . फळझाडे  
नर्सरीचे व्यवस्थापन व  
अर्थशास्त्र

वक्ते : यशस्वी उद्योजक  
**श्री सुरेश डोईफोडे**

गणेश हायटेक रोपवाटिका . लोणंदे . ता. खंडाळा . सातारा

बुधवार दि. २५/०४/२०२० सकाळी ११ वाजता

सहभागी होण्यासाठी  
आजच नाव नोंदणी करा  
संपर्क ९७३०५७०१५०



### iii) Solar Entrepreneurship Training :

i) Online Solar EDP Training for students of C.T BORA college was completed from on 21<sup>st</sup> March to 21<sup>st</sup> April. Classes were conducted online everyday. Students have completed assignments at their home and submitted online. It was attended by 19 students.

ii) Solar power based livelihood and entrepreneurship opportunities – was conducted on 13th April in association with SELCO Foundation & STARS forum. It was attended by 80 participants. Dr.Yogesh Kulkarni conducted the session.

iii) Solar drying systems and applications: Hosted on 22nd April in association with STARS forum. It was conducted by Dr.Yogesh Kulkarni and attended by 77 participants.

iv) Technology based opportunities in Agri-entrepreneurship: Yogesh, Ranajeet & Shubham participated in panel discussion & co-hosted webinar on agril-entrepreneurship hosted by Sheth Dhanji Devshi Kelavani KVO Fund (DDKF), Mumbai on 30th April.



Vigyan Ashram in association with Stars forum and Selco foundation organizing  
webinar on  
“Emerging opportunities in Rural area based on  
Solar Powered Technology .” for NGO’s  
Monday 13<sup>th</sup> April 2020. 11:00AM to 12:00PM



### E] Introduction to Basic Technology (IBT) :

IBT schools are completely closed with COVID19 pandemic lockdown. Still IBT schools instructor & student network tried their best to help community in creating awareness :

- IBT School instructors Katraj (Pune), Marunji (Pune), Dhamari (Pune), Asade (Pune), Mukhai (Pune), Chikhali (Pune) ,Paddare (Raigad), Vadachapat (Sindhudurg), Bhivadi (Pune) voluntarily made cloth masks using their sewing machine and distributed to local community.
- IBT schools updated their blogs and updated them. Following are some of the schools blog details :

SN	School Name	At Post	Blogger link
1	Sumati Balvan School	Gujarwadi, Katraj	<a href="https://sbskatraj.blogspot.in">https://sbskatraj.blogspot.in</a>
2	Swami Vivekanand Vidyalaya	Asde	<a href="https://svvasde.blogspot.in/">https://svvasde.blogspot.in/</a>
3	Indiraji Madhyamik Vidyalaya	Moi, Kuruli	<a href="https://imvmoi01.blogspot.com/">https://imvmoi01.blogspot.com/</a>
4	Shree Dada Maharaj Natekar Panchkoshadharit Vidyalaya	Chikhali	<a href="http://sdmnpvchikhali1.blogspot.in">http://sdmnpvchikhali1.blogspot.in</a>
5	Punaratthan Samarasta Gurukulam	Chinchwad	<a href="https://psgchinchwad.blogspot.in/">https://psgchinchwad.blogspot.in/</a>
6	New English School	Marunji	<a href="https://nesmarunji.blogspot.com/">https://nesmarunji.blogspot.com/</a>
7	Narsinh Vidyalaya Tathawade	Tathawade	<a href="https://nvtathawade.blogspot.com/">https://nvtathawade.blogspot.com/</a>
8	Zilla Parishad School	Nande	<a href="https://zppssnande.blogspot.com/">https://zppssnande.blogspot.com/</a>

Communitive data of various IBT schools in Maharashtra for academic year 2019-20 is as follows -

- Praj Foundation supported 'Model School Project' : 10 schools earned community service of Rs.2,44,513.00. It is found that school's overall performance was improved from 58.78 % (June 2019) to 80.52 % (March 2020). Credit of this improvement goes to very meticulous & sincere efforts by school instructors & administration.
- 15 IBT Schools supported by LTI infotech Ltd. earned a community service of Rs.6,79,409.00 during past academic year.
- AFCONS INFRASTRUCTURE LIMITED supported Anudanit Madhyamik Adivasi Ashramshala, Padsare (Raigad) IBT schools provided community service worth Rs.36556/-.

#### **F] Wikipedia publication update:**

Wiki girls team is working from home. They have taken book scanner at home. Following are details of their work during April:

- Komal completed OCR (Optical Character Recognition) for 25 books from Rajgurunagar library comprising 6308 pages.
- Scanning of 4560 Pages of 'Lokmanya Tilak Khand (Volumes)' were completed. So far we have scanned 7500+ pages of 7 'Khand (Volume)' out of 8. These will be further converted into OCR & published on wiki in coming days.
- VA staff and DIC fellows had contributed 22 articles on Wikipedia in Marathi & Hindi languages.

#### **G] Staff Training :**

- i) Ranajeet got selected for 'National Initiative for Developing & Harnessing Innovation' (NIDHI), Acceleration program for 'Aquaponics farming' enterprise. Program will be hosted by Indigram Lab Foundation. It will be 14<sup>th</sup> week online-offline training for 'Innovation based enterprise development'.
- ii) Padma Bhuman Dr.J.B.Joshi guided VA staff & students on 'Importance of Research and Development in India' on 26<sup>th</sup> & 28<sup>th</sup> April. Dr.J.B.Joshi is mentoring us for various technology development projects. We are very thankful for his support & valuable guidance in our work.
- iii) An online training session on "Reinventing ourselves" was conducted for all team members on 19<sup>th</sup> April. Session comprises of various aspects on positive thinking in 'personal, professional & social life'. Training session was conducted by Mrs.Swati Karve of Swasti Institute learning & development.



## H] Other Tid Bits :

- i) Research Paper Reading : Dr.Dixit and DIC fellows started collectively reading and discussion on selected research paper useful for our project. Sessions were held on 7<sup>th</sup>, 8<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 21<sup>st</sup>, 25<sup>th</sup>, 29<sup>th</sup> April. Sessions were held online.
- ii) [www.dsttara.in](http://www.dsttara.in) : We have updated [www.dsttara.in](http://www.dsttara.in) and posted COVID response of all core support groups on the website.
- iii) Yogesh attended Brainstorming session on "Post COVID19 Restoring Economic Growth :Role of SEED-DST" organised by Dept of S&T on 23 April 2020
- iv) Weather record – Rainfall of the month -06 mm (Total – 957.28 mm) ,Max temp-45.00 °C, Min Temp – 19.00 °C , Humidity – 42 % , Water height in well – 7.66 Mtr.
- v) Energy consumption record- Electricity unit – III Phase -1032 units , I Phase Export- 292 units, Import- 1258 units. DG used – 22.38 Hrs. Quality of power : Number of interruptions :77 , Normal voltage : 80.84% No supply : 4.15 % , low voltage : 9.32 % , No data: 5.69 %
- vi) Animal Husbandry section update – Milk production – 808 Kg , Goat- Weight gain (male bucks)- 9.56 Kg (FCR – 4.52), New kids born - 0 , Poultry Egg production – 181.75 dozens(FCR – 1.65) } We have problem in selling eggs due to lockdown. It was consumed by students on campus.
- vii) Biogas consumption – Dung used- 695 Kg, Gas produced- 18.99 M<sup>3</sup>, Two wheeler record– NA
- viii) Online visitors : [www.dsttara.org](http://www.dsttara.org) – 1468 (New visitor –1248 Repeated- 220) , [www.vigyanashram.com](http://www.vigyanashram.com) – 750(New visitor – 613 Repeated-137)

Data Report: [shorturl.at/dIOST](http://shorturl.at/dIOST)

<https://drive.google.com/file/d/12s2nBgrvTpNZeZKq8VZTk0l14A6KfpqW/view?usp=sharing>

(Work of VA is supported by Asha for Education, Praj foundation, EATON Foundation, L & T infotech, SPA Education Foundation, Megger (I) Pvt Ltd, INDUSA Endowment, Govt of Chhattisgarh, Savitribai Phule Pune University, Suzlon foundation, Dept of Science & Technology, and many individuals and foundations)

For Regular update: [www.facebook.com/vigyan.ashram.pabal](https://www.facebook.com/vigyan.ashram.pabal) ; [www.vigyanashram.blog](http://www.vigyanashram.blog)  
[www.vigyanashram.com](http://www.vigyanashram.com)