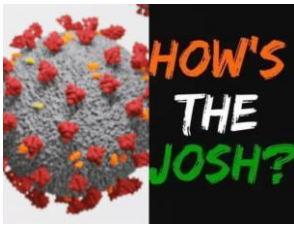


# Vigyan Ashram Status Report

Volume 38 Issue 07

July 2020

In this issue



## # Vigyan Ashram in Action # Under Lockdown

- Virtual Open House Exhibition on 30<sup>th</sup> July
- Academic year begins : Diploma in Basic Rural Technology (DBRT) 2020-21
- Bhoomi Poojan for construction of new toilet block & recreation center
- Vigyan Ashram @ FABxlive virtual FabLab annual conference

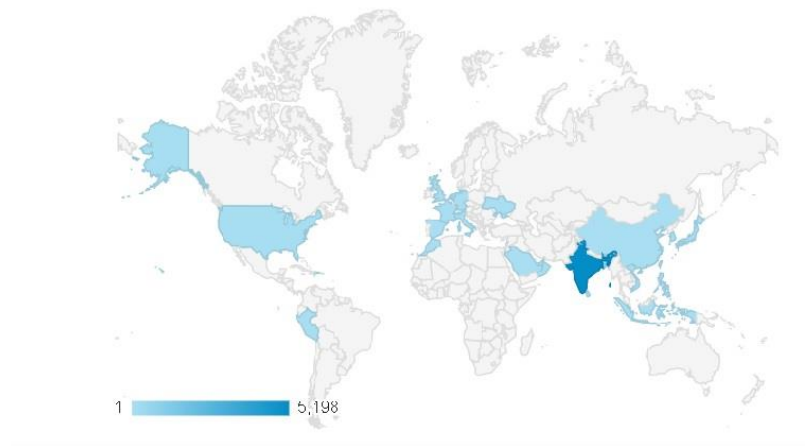
### A] Open House Exhibition

Every year, Vigyan Ashram is organizing 'Open House Exhibition' on 30<sup>th</sup> July on the Anniversary of Dr.S.S. Kalbag. It is not possible to invite people to ashram due to COVID19 pandemic & lockdown.

This adverse condition gives us an opportunity to organize 'Virtual Online Exhibition'. Vigyan Ashram team worked very hard and created video tour, online technology presentation etc. An online exhibition is available on <http://vigyanashram.online/>. We have got technical support from volunteers of Eaton foundation.

On 30<sup>th</sup> July, we have conducted various face book live sessions of our educational programs and technologies. Its available on facebook page <https://www.facebook.com/vigyan.ashram.pabal>.

We got tremendous response for our online exhibition. We have got more than 6000+ visitors on 30<sup>th</sup> July. Our facebook live cumulatively got more than 30000+ views. We are thankful for support & love from our viewers & partner organizations. A special thanks to Eaton foundation volunteers for their support. We have decided to make <http://vigyanashram.online/> permanent exhibition place.



Visitors to online exhibition

## B] Beginning of Academic year : Education @ Home

- I. **Diploma in Basic Rural Technology (DBRT) 2020-21 batch:** New academic session of DBRT program started from 10th of July. Due to COVID pandemic, we are conducting course with new innovative approach. It's a blend of online-offline mode delivery with 'Do-it-yourself' activities at home. We have collaborated with 'Narmadalaya' (Kasarwad, Madhya-Pradesh), Barefoot college (Tilonia, Rajasthan) and Yusuf Mehar Ali Center (Panvel, Maharashtra) as our work-benches for hands-on activity & local institutional support for students. We have 63 students (30 individual participants, 12 Narmadalaya, 8 Barefoot college, 12 YMAC) for this batch. Classes are conducted using video conferencing, every alternate day for 1 hr. Students are introduced with new topics and given hands on activities to be done locally. We are eagerly waiting for students to come on campus but till then , we are exploring new methods to continue education.



- II. **Training on establishing kitchen garden (हरित पोषण घरघरी) : A training to train 50 कृषी सखी (Agri group leaders) from 10 district of Mahila Arthik Vikas Mahamandal (MAVIM) in establishing kitchen garden** was started on 9<sup>th</sup> July. This program was inaugurated on 9<sup>th</sup> July in presence of Hon Minister of Women and child development Ms Yashomati Thankur, Mrs Jyoti Thakare (President, MAVIM). Mr. Ranajeet, Mr Ganesh Pingale, Ms Vaishali Gawandi will be expert trainer for the training. Vigyan ashram is conducting this program in collaboration with STARS forum. This Program aims to train 400 WSHG members for achieving food security in rural area through scientific cultivation of vegetables in kitchen backyard in online training & post training support.

**परसबाग लागवड प्रशिक्षण संस्था** stars Forum

5

वैशाली गवंडी  
रणजीत शानभाग  
विज्ञान आश्रम, पाबळ  
गणेश पिंगळे  
रूरल कम्युन्स, मुंबई

भक्ती तळवेलकर  
स्टार्स फोरम, पुणे  
चैतन्य नाडकर्णी  
स्टार्स फोरम, पुणे

VIGYAN ASHRAM  
MPC&T, Pune



Kitchen garden training program beneficiary

III. **Entrepreneurship Development Program on food processing technology:** A new training program was started on entrepreneurship opportunities in food processing sector on 24<sup>th</sup> July. We have 12 participants enrolled for 5 weeks (25 Hrs) online training & mentoring session on food processing technologies like drying, sugar syrup preservation, baking etc along with enterprise management skills. Participants will also get hand-on training at Pabal campus & hand-holding support for their enterprise after end of lock-down.



Vigyan Ashram  
विज्ञान आश्रम आयोजित  
उद्योजकता विकास कार्यक्रम

खाद्यपदार्थ निर्मिती प्रशिक्षण कार्यक्रम

उद्योजकता प्रशिक्षण कार्यक्रमाची वैशिष्ट्ये  
- प्रत्यक्ष कामातून शिका  
- एक व्यवसाय चक्र पूर्ण होईपर्यंत मदत  
- 50% ऑनलाइन, 50% हँड्स ऑन

प्रशिक्षणतील विषय  
- तांत्रिक सत्रे- अन्न पदार्थ जतन प्रक्रिया बेकरी उत्पादने ,भाजीपाला वाळवणे  
- मार्केट सर्वे , बिझनेस प्रोजेक्ट्स , पॅकेजिंग .

कालावधी - 24 जुलै 2020 ते 22 ऑगस्ट कोर्स फी : २००० रुपये  
आपला प्रवेश निश्चित करण्यासाठी खालील मोबाईल नंबर वर संपर्क करा -  
9730570150 edp.vigyanashram@gmail .com

IV. **'Design a Solution' training:** First batch of 'Designing a solution' course completed their training on 17<sup>th</sup> July with 12 participants completing 10 online sessions and 10 mentoring sessions, assignments & submissions. On 7<sup>th</sup> July, Shri.Arun Deshpande ,Prayog Parivar, Ankoli (Solapur, Maharashtra) shared his experiences on 'green economy & entrepreneurship'. Students of this course can join 'Design Innovation Centre 'at Pabal for making their prototype.

**C] Bhoomi Poojan of new WC toilet unit & recreation center** - Bhoomi-poojan ceremony for construction of new toilet block & recreation center for ladies hostel was done on 15<sup>th</sup> July. WC unit will have 400 m<sup>2</sup> RCC (Reinforced Cement Concrete) with 4 WC & 4 bathrooms, 14000 lit rain water harvesting tank, grey & black water recycling system. WC unit will day scholar students, visitors.

Similarly work of fabrication of recreation center at ladies hostel roof top is also started. This will serve purpose of socialize , relax, exercise, cloth washing etc purpose and also stop roof leakages during monsoon months. Fabrication work is started to cover 1500 sq ft roof top with 150 sq ft sit-out with common cooking & cloth washing area.

We are thankful to ASHA for Education for their financial support for this work.



Ground breaking ceremony of toilet construction



Ladies Hostel shed work in progress.

## D] Vigyan Ashram @ FABxlive virtual FabLab annual conference : FABx

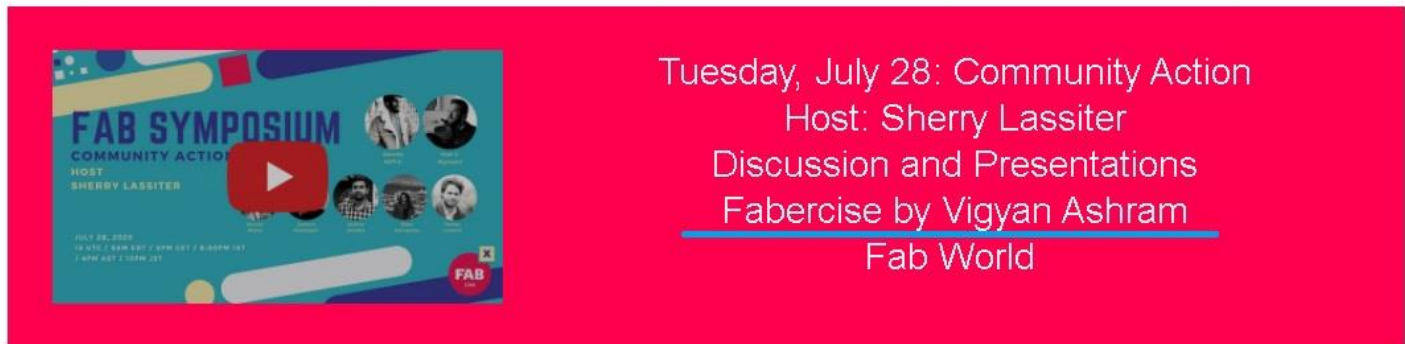
Due to pandemic, annual Fab International conference was held online from 27th -31st July. Vigyan Ashram team participated in symposium, training workshops and fab lab activities. We have participated in online expo by displaying seven projects listed here : <https://fabxlive.fabevent.org/expo>

Following are other contribution of Vigyan Ashram in the Fab celebration :

A] Fabexerise: Whole vigyan ashram team participated and presented Barchhi Dance (Street Drum Dance) on 28<sup>th</sup> July. Watch video : [https://www.youtube.com/watch?v=GYsY3QnGjCA&feature=emb\\_logo](https://www.youtube.com/watch?v=GYsY3QnGjCA&feature=emb_logo)

Arundhati had taken meditation session on 30<sup>th</sup> July : Watch video :

[https://www.youtube.com/watch?v=GCoDwz3Degs&feature=emb\\_logo](https://www.youtube.com/watch?v=GCoDwz3Degs&feature=emb_logo)



B] Team Vigyan Ashram had also participated in various competitions. We have won two prizes.

Congratulations to Pooja , Aditi and Fab Lab team ! We are also proud that our alumni and Fab Academy instructor Ms Arundhati Jadhav won '2020 Teacher innovation Award' for innovative educational activities conducted in her school.

<p>Pooja Jadhav won Social Distancing Challenge. Award is Brother computerised sewing machine.</p>	<p>Aditi won 'Hand washing station challenge' Award is Forest FabBOT CNC machine.</p>
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## E] Design Innovation Centre (DIC) & FAB academy updates-

- Suhas had installed 2 units of 'autofarm', an automated temperature-humidity logger at 2 polyhouse farmers in Jategaon village on 23<sup>rd</sup> July for testing them at field conditions & getting user feedback.
- Under aquaponics trial, fish growth & FCR record were taken for Tilapia cultivation trial. Overall fish FCR is satisfactory, but lower weight gain is probably due to anti-nutritional factors in azolla and premature breeding of tilapia are recorded. We are studying alternative solutions like azolla fermentation & koi-tilapia fish polyculture system as probable solution.
- Sonal presented her work under 'Women Scientist Scheme – B' fellowship in online meeting on 23<sup>rd</sup> July. She has started field trials of 'agro-waste' composting technology at 3 different location as Gulani, Saradwadi and Pabal village on 7<sup>th</sup>, 16<sup>th</sup> & 30<sup>th</sup> July respectively.

- Under SELCO Foundation supported 'solar powered fan-pad system for climate control polyhouse' project, sanket tested DC motor (1 HP, 180 Volt DC with 4.4 Nm torque) for its application. Motor is lacking in desire torque ( 7.76 Nm) and we are consulting SELCO technical team & manufacturer of DC motor for getting desire torque in given power factor.
- Priyanka Gharat has successfully tested application of insulated water kettle (2 lit capacity) as home scaled curd making unit. She has documented curd making protocol along with technical specification for selection of insulated pot, bacterial culture inoculation & incubation period. Details are available @ <http://vadic.vigyanashram.blog/2020/06/19/curd-maker/>
- Prasad Patil designed & fabricated 50 lit capacity waste plastic bailing (compacting) machine. This bailing press is designed based on 2.5 lit (lab scale ) prototype made in the month of June20.
- Pooja designed & sold 20 units a 'digital rakhi' by using laser cutter & LED glow lights. She has also designed a DIY kit in the form of educational kit for high school student.
- As a part of monthly review meeting, Dr.J.B.Joshi guided DIC students on their technical project & reviewed their project on 23<sup>rd</sup> July. We are thankful to Dr.Joshi sir for his time & guidance for our technical projects.
- TATA ProEngage: Mr. Avinash Yadha & Mr.Shailendra Junagade both senior design team members of TATA motors & TATA technology respectively are volunteering with us. They are helping us in standardizing CAD designs of selected technology projects. Both of them will work with us for 6 months through online mode.
- Fab academy updates: Mr. Nikhil More and Miss. Tejswini Chaudhary successfully completed their FAB academy project submission & presented their project on 22<sup>nd</sup> July. They worked on 'solar powered smart chimney' and 'solar DC automated shredder' project respectively. Their project details are available on <http://fabacademy.org/2020/labs/vigyanashram/students/tejswini-chaudhari/> and <http://fabacademy.org/2020/labs/vigyanashram/students/nikhilkumar-more/my%20project.html> .



#### F] DBRT course & Pabal Campus update :

- 5 girl students from Madhya-Pradesh completed their DBRT course and returned back to their native place on 22<sup>nd</sup> July. Due to lockdown they were stuck at Pabal from past 1 month. During their extended stay, they have learnt processing of Mahua flowers for preparing various innovative recipes like ladu, halwa mix, dried powder etc. These girls wish to start their cottage scale processing unit for locally available agro-produce.
- In engineering section, Pawan & Ganesh repaired DIC classroom WC unit roof. Older roof was rusted and un-safe for use.
- Agriculture department team harvested 32 Kg okra, 30 Kg spinach, 2 Kg beans and 1.5 Ivy gourd (tondli) along with 1028 egg and 592.27 lit milk.
- Electrical section : Replaced service cable of chaff cutter machine, made electrical fittings for new recreation center on ladies hostel roof top and maintenance work in food processing section.



## G] IBT schools online training & classes :

All schools are closed due to pandemic. We have started to reach out to IBT students & instructors for online training and conducting Do-It-Yourself activities at home.

Every week we are conducting online classes for IBT students on new technologies. During month of July, ten online training sessions were conducted. Topic covered during this month are how to make face mask, home based herbal garden, moringa leaves fortified chikki, home based first aid kit, preparing organic pesticide etc. skills. Sessions benefited 80+ instructors & 600 + students from 25 + IBT schools. Following are some of the highlighted activities performed by students at home by attending session as –

- After attending face mask making session 20+ schools made 400+ face masks and distributed to parents & community members.
- IBT schools have started manufacturing of pedal operated hand wash/ sanitizer dispensers.
- IBT students & instructors also learned to make UV lamp-based disinfection box.
- Agriculture section instructor at Chikhali (Pune) IBT schools, prepared compost bed for leaf litter & bio-waste in Schools. This school also conducted online exhibition of various IBT products & educational content prepared during lockdown period on 31<sup>st</sup> July.
- Students of Dhamari, Nande and, Tathwade, Schools made 15 first aid kits for home use after attending online training session.



## H] Wikipedia publication :

Wiki team published following articles/book during July -

- New wiki articles published - [नालापट बालमणी अम्मा](#), [अदिती पंत](#) , [शाश्वत शेती](#)
- Book scanned for OCR conversion- 500 pages of [रानडे इंग्रजी-मराठी शब्दकोश खंड पहिला \(The Twentieth century English-Marathi Dictionary Volume 1](#)
- OCR made for following articles

Publisher / writer	OCR article URL
Shetkari Sanghatna magazines	<a href="#">राखेखालचे निखारे</a> , <a href="#">शेतकरी संघटना : विचार आणि कार्यपद्धती</a> , <a href="#">शेतकऱ्यांचा राजा शिवाजी आणि इतर लेख</a> , <a href="#">अंगारवाटा...शोध शरद जोशींचा</a>
Jai Nimkar	<a href="#">अर्धुक</a> , <a href="#">अॅलिस</a> , <a href="#">कमळाची पानं</a> , <a href="#">साथ</a>
Narhar Kurundkar	<a href="#">अभिवादन</a> , <a href="#">ओळख</a> , <a href="#">थंब अत्तराचे</a> , <a href="#">परिचय</a> , <a href="#">पायवाट</a> , <a href="#">रंगविमर्श</a>
Rajendra Mane	<a href="#">लोक संस्कृतीचा गाभारा</a>
Randhir Shinde	<a href="#">अन्वयार्थ</a>

## I] Heroes of the month (under lockdown) enterprise success story-


- Our DBRT 2016-17 batch alumni started his 'Akshay traditional food enterprise' in Pune city. He is making & selling 20 + traditional festival processed food products like Pooran poli, Modak, Chikki, Mango Pulp Burfi, organic millets & pulses etc in Pune city. We are providing enterprise incubation support under EDP program.
- Mr. Akash Dhamale, our DIC course alumni started 'Meenai Agro engineering' a metal fabrication enterprise Peth village of Ambegaon Tahsil (Pune). Akash is providing fabrication services for agricultural tools and industrial applications.

## J] Other tit-bit –

- Annual review & planning meeting of all project staff & student fellow was conducted on 27th & 28th July at Pabal campus. Meeting aimed at reviewing progress made in various project, difficulties faced and plan for coming year.
- Yogesh wrote article on Fab Village in Marathi magazine 'Vanarai' July 2020 issue.
- Donations : We are thankful to Ms Seema Gadkari for her donation to Vigyan Ashram.
- Weather record – Rainfall of the month -79.72 mm (Total – 277.91 mm) ,Max temp-39.00 °C, Min Temp –21.00 °C , Humidity – 92 % , Water height in well – 6.50 Mtr.
- Energy consumption record- Electricity unit – III Phase -1245 units , I Phase Export- 245 units, Import- 612 units. DG used – 12.25 Hrs. Quality of power : Number of interruptions :87, Normal voltage : 84.81%, No supply : 9.15 % , low voltage : 6.04 % , No data: 0%
- Animal Husbandry section update – Milk production – 592.27 Lit , Goat- Weight gain NA , Poultry Egg production – 85.66 dozens (FCR – 3.09)
- Biogas consumption – Dung used- 373 Kg, Gas produced- 18.66 M<sup>3</sup>, Two wheeler record– NA
- www.dstattara.org – 1126 (New visitor –973 Repeated- 153) , www.vigyanashram.com –1469 (New visitor – 1161 Repeated-308)

## K] Data Report: [shorturl.at/mxyA8](http://shorturl.at/mxyA8)

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

  
VIGYAN ASHRAM  
Instruction Sheet

# Smart Rakhi

Make your own Digital Rakhi

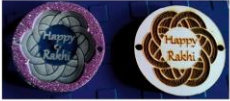
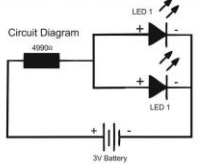
**Feature -**  
**Digital Electronic Rakhi Using Laser Cutter Machine.**

### Electronic Material

**LED**  
Emits light when current flows through it.

**Resistor**  
Resistors are used to reduce current flow.

**Button cell**  
Button cells are used to power small portable electronics devices.

**Steps :-**

- Step 1:- Take Acrylic Smiley and Cover it with shiny gelatin paper smiley shape.
- Step 2 :-Paste this aline part on laser cut flower part using fevicol.
- Step 3:- Insert Thread in holes given on this smiley shape.
- Step 4:- Ready To Wear.

Price:- Rs.80/- Only

Address - Vigyan Ashram,Pabal Tal - Shirur,Dist - Pune 412403  
Contact - +91 8386962704  
E-mail - jadhavpoos367@gmail.com / vapabal@gmail.com  
Website - www.vigyanashram.com

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

Photo Gallery:



Miss. Grarcy from MP getting DBRT completion certificate.



Agro-waste composting trial @ Pabal farmer



IBT Marunji School student distributing face mask



IBT student with first aid box learning activity



VA Team @ 30<sup>th</sup> July online open house exhibition

For Regular update:  
[www.vigyanashram.com](http://www.vigyanashram.com)

[www.facebook.com/vigyan.ashram.pabal](https://www.facebook.com/vigyan.ashram.pabal) ;

[www.vigyanashram.blog](http://www.vigyanashram.blog)