

# Vigyan Ashram Status Report

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- DBRT batch started on 10<sup>th</sup> July
- Open House Exhibition on 30<sup>th</sup> July
- Advanced training program for Electricians
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## **A] Workshop on Technology Acceleration Platform**

i) Vigyan ashram (VA) & Development Alternatives (DA) jointly organized 1 day brainstorming workshop on 'Technology Acceleration Platform

for Rural Innovations & Social Entrepreneurship (TAP-RISE) on 10<sup>th</sup> July at New Delhi. This workshop was supported by Dept of Science and Technology (SEED) division. It was attended by 40 participant from Expert Committee members of DST , DST officials , CORE group members, Incubators supported by DST.

A need of incubator for rural technologies developed by DST core support group was discussed in the meeting. VA and DA proposed a framework for scaling up of



technologies developed by core support organisations supported by DST. Outcome of the workshop was presented in the Expert committee meeting of DST on 11<sup>th</sup> July.

DST asked to submit a proposal for 'Pre-proposal stage' funding to develop comprehensive proposal on 'Technology Acceleration Platform'

DST CORE support GMW – Ranajeet and Yogesh presented work done under 2<sup>nd</sup> phase in front of Executive committee meeting of DST on 11<sup>th</sup> July. EC evaluated work done under 1<sup>st</sup> and 2<sup>nd</sup> phase of core support. They have recommended visit by Expert committee to VA for evaluation of 3<sup>rd</sup> phase proposal.

ii) We have installed Sanitary napkin incinerator at Development Alternatives office.

iii) Yogesh visited AKGEC Fab Lab and NIOS head quarter on 12<sup>th</sup> July.

## **B] DBRT New batch 2018-19 :**

New batch started on 10<sup>th</sup> July with 46 students. This year we have made certain changes in the course implementation. Students are divided into 3 groups – Engineering, Energy-Environment, Agri-AH& – Food. We have combined Agri and Food section. This will ensure students remain engaged on all days & all seasons. Each section will be for 3 months and last 3 months will be for community services and contracts. We will be enrolling 10 students in October and 10 in January.

We have included Fab Lab as integral component of the course. Further instead of dedicated instructor for each section, we have allocated syllabus to DBRT and IBT team based on their expertise. Following is the structure:

Mr.Ranajeet Shanbag : Overall Incharge of all Educational Program on campus

Engineering – Mr.Laxman Jadhav,  
Mr.Abasaheb

Energy and Environ – Mr.Suyog  
Warghade , Mr.Kailash Jadhav

Agri and Food - Mr.Ganesh  
Pingale, Mrs Reshma Hawaldar  
Rector and Admin – Mr.Vishal  
Jagtap

DBRT students will be included in the project undertaken by DIC students. DIC students are with minimum graduation qualification, this will help in peer to peer learning. There is also change in the format of meditation and discussion session

in the evening. We hope to further improve our course delivery based on the feedback received during last year.

We are thankful to Asha for Education, Eaton Foundation, SPA Education foundation and many individual supporters for providing financial support to the batch 2018-19.



**Arrival of new batch -- Hope ..Excitement ..**

## **C] Open House Exhibition: 30<sup>th</sup> July : Tribute to Dr.Kalbag (Founder,Vigyan Ashram)**

We have organised Open House exhibition on 30<sup>th</sup> July. It was visited by 3092 visitors including students from 26 + schools and 8 colleges. This year we exhibited 'Fab village' as a theme of the exhibition. We have displayed various technologies and projects completed last year.

We have also broadcasted the event live on facebook. Various awards were given on the occasion – 'Young entrepreneur award' : Mr.Vithal Shid (DBRT alumni) 2003 – 04 batch. He is running 'Chikki' making enterprise.

'The Best IBT School Award for Year 2017-18' : Lokamanya Tilak Vidyamandir, Chikhalgaoon

'The Best IBT Project Award for Year 2017-18': Hydroponic project : Adarsh Prashala, Nagaj

Mr.Prakash Patil (Yash Engineers), who worked with VA for 2 yrs before starting his company was chief guest of the function. Sarpanch of Pabal village, Panchayat members and local leaders, Member Secretary of IIE, Members from various funding agencies, friends and well wishers visited ashram.



Snap Shot of Open House Exhibition

**D] Poultry Business Training workshop:**

Poultry Business training workshop was conducted on 6th & 7th July. This Entrepreneurship Development Program (EDP) was attended by 9 participants. They were given training on basics of poultry farming business, Management of broiler – layer – indigenous breeds. They also visited M/s.FIS Incubators at Wagholi.

Dr.A.G.Apsinge and Mr.Ranajeet Shanbag conducted trainings sessions at Pabal & Wagholi.

Poultry farm update – Number of eggs – 2556 Egg , Kg of feed used – 388,8 Kg (FCR – 1.82 / dozen of eggs) , Mortality – 2 Birds.



### E] Advanced Electrician Training Program :

Training program on advanced electrical measuring instruments was held at DIY lab, Pune on 22<sup>nd</sup> July. 48 electricians and motor rewinding personnel participated in the training. They came from Pune rural district, Sangamner, Kopergaon, Saswad, Dapoli , Jamkhed etc.

Students were given training on measuring earthing, insulation, safety equipment and devices etc.

Mr.Anant Waghcoure of M/S Megger India Pvt Ltd and Mr.Prakash Shaha were main resource person. Training was sponsored by M/S Megger India Pvt Ltd. They have also gifted Megger CAT4 Multimeter to the trainees.



**F] Fab14 Conference :** Ms Arundhati Jadhav represented Vigyan Ashram in the Fab14 conference at Toulouse, France from 16<sup>th</sup> – 22<sup>nd</sup> July. Arundhati participated in various workshop and learned new techniques. It was good networking opportunity to connect with other fab labbers around the world. She had collected Fab Academy certificate of 8 Vigyan Ashram's students in the Fab Graduation Ceremony.



**Arundhati receiving certificates from Neil at Fab14**

### G] IBT News :

- a) Meeting of Twelve IBT school headmaster and coordinators was held on 25<sup>th</sup> July 2018 at

JPNC, Pune. These schools are supported under Model School project of Praj foundation. Mr. Vinayak Kelkar, CSR Head, Praj Foundation was present. We had discussed progress made during last academic year, issues related to examination under NSQF and plan for next year in this meeting.

- b) IBT headmaster and coordinator meeting of Nalanda Foundation supported schools was conducted on 13<sup>th</sup> July 2018 at Narayangaon. Plan of action for coming academic year was finalized in the meeting.

- c) IBT Lectures using Video Conferencing: Ranjeet conducted IBT class on Nursery technique (14<sup>th</sup> July), Preparing animal fodder (21<sup>st</sup> July), Azola & Silage (28<sup>th</sup> July). Total 1485 students from 13 schools attended the conference.
- d) Draft books of IBT-MSFC books for Xth (Level2) std by VA team and IBT instructors. They are available for suggestions :
- L2\_अभियांत्रिकी\_विभाग\_VA\_Notes:  
<https://drive.google.com/open?id=1NiBADPFajSlqfiNaXL45onYB-Q2uLNhl>
- L2\_उर्जा\_पर्यावरण\_VA\_Notes:  
<https://drive.google.com/open?id=15JkltcuJgfNRAWEiiqSXPY9RGBZLnRIH>
- L2\_वैयक्तिक\_आरोग्य\_स्वास्थ्य\_विभाग\_VA\_Notes;,  
[https://drive.google.com/open?id=1szioPoOb\\_n2bcz8EFSVLDfB2spEkG9wO](https://drive.google.com/open?id=1szioPoOb_n2bcz8EFSVLDfB2spEkG9wO)
- L2\_शेती\_पशुपालन\_VA\_Notes:  
[https://drive.google.com/open?id=1hl\\_h-Rxt\\_4QTIZIEBC-o9sHKTRWvs-p0](https://drive.google.com/open?id=1hl_h-Rxt_4QTIZIEBC-o9sHKTRWvs-p0)
- e) L&T Infotech CSR head Ms Kshipra Sharma & team visited IBT program of Sumati Balbhavan on 5<sup>th</sup> July.
- f) DIY team Conducted 3D printing workshop at Sumati Balbhavan, Katraj.

#### H] Campus Update :

- a) **New Hostel Update :** We have completed most of the work on ground floor of new boys hostel. We have completed flooring, plumbing, colouring & electrification work. We have requested few passing out DBRT students to stay back after 25<sup>th</sup> June. They helped us in completing the work. We have allocated 6 rooms to new DBRT batch.



Plumbing



Fabricating Cot



Fitting windows

- b) **Replacing plastic paper of farm tank :** Farm tank of 40 lakhs litre capacity was made in 2009. Its plastic lining needs replacement. From the community services earned from soil testing, we have replaced old plastic lining with HDPE Lining ISI Mark 15351:2015, 500 Micron Thick, Black colour sheets of size 2356 sq.mtr ( 38 Mtr x 62 Mtr ). It cost Rs.2.16 lacs.

We have installed the lining on 2<sup>nd</sup> July. It was good team work of all VA team to lay plastic in the farm tank.



### I] Technology Development

1. Mr.Kelkar and Mr. Ramesh chandra visited Vigyan ashram on 28<sup>th</sup> July 2018. We have discussed Fab Village project. Mr.Ramesh Chandra will guide our students on following projects : a) Dryers for fruits and vegetables b) Aquaponics c) Lemon processing
2. Mr.Dasnurkar visited VA on 31<sup>st</sup> July and gave inputs on dome dryer.

#### 3) Technology Project Status :

Dome Dryer – Design is finalized, Material selection was done, Cost estimate was made and got sanctioned.

Nachani roaster - First prototype was tested. It was found that motor with 10 kg- cm torque is required. To avoid charring of floor on the surface of Pan, distance between blades and Pan needs to be reduce.

Trichoderma Viride- We got this technology from AAKRUTI package of BARC. We have started mass multiplication of trichoderma Viride. We are planning to use it for treatment of compost and for seed treatment on the campus.

Grey water recycling – We are experimenting with water hysinth, Azolla, Taro leaves and canna indica in separate drums. It is found that Water hysinth is most effective with initial COD of 174ppm dropping down to 10ppm in 7 days.

Humidity measurement system – Reliable Humidity sensors available in the market are costly. We have coupled traditional wet bulb-dry bulb method to calculate relative humidity with data logger and micro controller program. This will be cheaper and reliable option.



Grey water recycling experiment

**J] Other tit-bits :**

- i) Visitors to Pabal campus – XX ;  
www.dsttara.org – 822(New-726 ,  
Repeated –96),www.vigyanashram.com –  
1800(New visitor – 1487 Repeated-313 )  
,www.vigyanashram.wordpress.com –  
2045(Visitor-1456 Viewers- 589)
- ii) Weather record – Rainfall – 99 mm (Total  
201 mm) ,Max temp- 32 °C, Min Temp –  
24°C , Humidity – 80%, Water height in well  
– 5.6 mtr.
- iii) Energy consumption record- Electricity  
unit – III Phase- 854 unit, I Phase- 1205 unit.  
Quality of power: Number of interruptions :  
  
32, No power : 102 hrs. Normal voltage :  
70%, Low voltage : 2%, No supply : 13% , No  
data : 14%
- iv) Two wheeler usage : XX kms
- v) Biogas consumption – Dung used- 53 kg kitchen waste, Gas produced- XX m<sup>3</sup>.



**Job done in Fabrik Class @ Pabal**

**Data Report :** <https://drive.google.com/open?id=1FwUMFEmiVtbrweMvj8ogrKnVFHcuTRh0>

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

Our sites : [www.learningwhiledoing.in](http://www.learningwhiledoing.in) , [www.dsttara.in](http://www.dsttara.in) , [www.vigyanashram.wordpress.com](http://www.vigyanashram.wordpress.com) ,  
[www.vadic.wordpress.com](http://www.vadic.wordpress.com) , <https://ruralstartup.wordpress.com/>

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**Photo Gallery :**



**Bag Garden : IBT Bhivadi**



**Bag Garden : IBT Kurze**



IBT HM Meeting @ JPNC



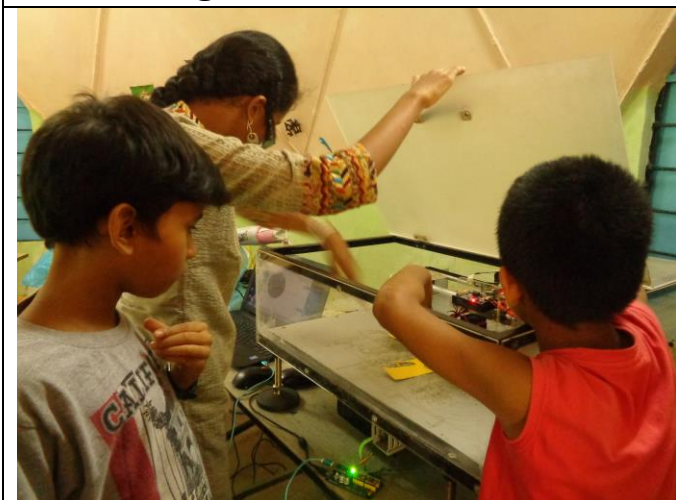
Best IBT Project : Nagaj High School



New Fab Lab @ Palnar



Heliostat getting installed at Pabal



Students at DIY Lab working on Laser M/C



Training of electricians