

# Vigyan Ashram Status Report

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## In this issue

- Yogesh gave key note speech in FAN4 conference in Vietnam
- Planning Agriculture activities for monsoon
- First batch of IBT Instructors training 25<sup>th</sup> – 29<sup>th</sup> May
- Installation of Micro Solar Dome in 46 houses of Palnar village (Dantewada)

### A] Fab Asia Network (FAN4) conference in Vietnam

Yogesh was invited to attend FAN4 conference in Ho-Chi-Minh City, Vietnam from 2<sup>nd</sup> – 6<sup>th</sup> May. He gave talk on 'Sustainable Development Goals and Makers Movement'. Yogesh also participated in various workshop as a resource person and helped participant to develop solutions to the local problems. FAN4 was attended by more than 100 participants from various Asian countries.



Yogesh delivering key note address



Designed a dryer for Grass Straw for a straw making farmers

**B] Agricultural activities : Preparing for monsoon :** In Pabal, summer is at its peak with temperature reaching 41 degree. We have started preparation for agriculture season.

**i) Soil Health Card mission 2018-19 :** SHC 2018-19 season started with collection of samples from selected villages. Vigyan Ashram is approved lab for soil testing. We will test 3490 samples representing 13808 farmers from 12 villages in Pabal agriculture cluster.



Ranajeet attended SHC planning & execution committee meeting chaired by Pune district collector was held on 18<sup>th</sup> May 2018. In this month, DBRT students collected around 689 samples from kendur village as part of their learning activity. Students visited individual farmers & explained them important of sample, analysis & SHC scheme while collecting samples. As a part of awareness campaign, Ranajeet participated in 'famers meet' @ Hivre village on 30<sup>th</sup> May on Soil Health Card mission.

**ii) Hailstorm in Pabal:** On 21<sup>st</sup> May, a sudden hailstorm occurred on campus. It damaged our polyhouse & solar conventional dryer. Polyhouse covering paper got damaged (loss of approx. Rs.25000) and one of the toughened glass panel of solar dryer (loss of approx. Rs.5000) got damaged with this hailstorm.



**Damaged Polyhouse**

**iii) Aquaponics:** We have started new aquaponics trial. Following work activities were completed :  
→ Fish tank & sludge tank was cleaned. Fish tank was painted with blue oil paint to identify any leakage & locate fish during trial.

→ Bio-beds were repaired. Siphon system was replaced with bigger (2-inch dia) PVC pipes.  
→ Sludge pump & Oxygenators was ordered. We are doing this trial in collaboration with Neelkranti (Mr.Suvodeep Sarkar & Abhijit Patil), a Pune based startup working on promoting urban farming. They will be investing part of recurring cost for the project.

iv) Ranajeet and Dr.Arun Dixit visited Devgad on 16<sup>th</sup> May. We are exploring possibility of establishing aquaponics system in konkan region.



**Maintenance of fish tank**

In Konkan, at many places land is excavated for mining of lateritic rocks. This excavated land sites can be used for fish farming with aquaponics. We are hoping to start some trial experiments with local farmer.

### **C] Update : Innovation Lab @ Palnar (Chattisgarh)**

**i) Micro Solar Dome Installation in Palnar :** Chattisgarh team has installed 46 Micro Solar Domes (MSD) in remote huts in Palnar and Chandenaar village in Dantewada district. We have received MSDs from NBRIT in Kolkatta for pilot testing. We have decided to install in Palnar villages

ii) Suyog conducted training of CG team in MSD installation at Chandenaar (Dantewda) on 21<sup>st</sup> – 23d May.



iii) Arundhati conducted two short workshops in summer camp at Chandanar on 21<sup>st</sup> and 22<sup>nd</sup> May. She taught students to make paper crafts and simple LED wrist band. Approx.60 students participated in the workshop.

iv) Electrical wiring and earthing work is completed at Palnar lab.

#### **D] IBT Updates:**

i) IBT school @ Nagaj sold hydroponic unit to farmer Mr.Subhash Patil (At.Post Soaradi, Tal Jat, Dist.Sangli) for Rs.10,500/-. Mr.Ganesh



**MSD Installation**

Pingale visited the site on 10<sup>th</sup> May to handover the machine.

ii) There was a demand from schools for 10<sup>th</sup> std book as per the revised syllabus. A three days workshop was organised at JPNC,Pune from 17<sup>th</sup> – 19<sup>th</sup> May. 11 instructors and 5 IBT team members contributed chapters for the book.

iii) IBT instructor training program was conducted between 25<sup>th</sup> May to 29<sup>th</sup> May at Pabal. Total 39 IBT instructors from total 11 schools supported by Nalanda Foundation, One Step & Suzlon foundation participated in the training. We have conducted various activities as per the need expressed by



**IBT book writing workshop**

instructors. They were introduced with new evaluation process.

iv) Training on vertical farming – One day training workshop was conducted on plastic bag based vertical farming technique developed by Rural Communes. Training was part of the IBT instructor training program. Mr. Rameshkumar Sakhare & Mrs. Sarika Gaikar from Rural communes conducted this training. We are planning to introduce this technology through IBT program

v) Sachin attended meeting at MPSP office, Mumbai on 24<sup>th</sup> May 2018 to discuss the NSQF course implementation issues and its approval from NSDC. Various issues regarding implementing IBT as core subjects were discussed.

vi) Kailash Jadhav attended training workshop organised by Suzlon foundation for its partner from 8<sup>th</sup> – 1<sup>th</sup> May in Pune.

vii) **Case Study from Jangla** : Students of IX std made platform (चबुतरा) around tree in March. They have made 300 cement bricks, laying of the bricks, plastering and painting.

viii) Workshop on online content, rreporting, blog writing and using Video conferencing was organized from 15<sup>th</sup> & 19<sup>th</sup> May at Narayangaon. Total 16 instructors from 4 school participated in the training.



**Chabutara @ Jangala(Bijapur)**

#### **E] DBRT Updates :**

i) **DBRT board Exam** : DBRT board exam of previous batch was held from 2<sup>nd</sup> – 5<sup>th</sup> May. Out of 62 registered candidates 40 appeared for the examination.

ii) **NIOS Exhibition**: We have displayed DBRT course in NIOS stall at 4th Global Exhibition on services organized by the Ministry of Commerce and Industry from 15th to 18th May, 2018 at Mumbai.

iii) **Poultry farm update** – Number of eggs – 678 Egg , Feed used – 274.4 kg, Hens on egg – 22 to 30 (20 to 25%) Mortality – 2 Birds. We are hoping to

get eggs from 50 to 60 % birds in next month and achieve break-even.

#### **iv) Engineering Section Highlights :**

- DBRT student Akash and Prathmesh fabricated windows and doors for new hostel.
- DBRT students completed work order for table from villager Mr.Dipak lokhande.
- Students complete 2ft\*3ft\*4ft Gill of Mr.Sanjay bhandari
- Students completed shed of Mr.Shivaji bagate of 15ft\*30ft



**NIOS Exhibition @ Mumbai**



- v) Energy Section: - DBRT students carried out various maintenance work For e.g : Jansangam , Motor installation in village, Repair of DG set, repairing at hostel no.3, Vacuum pump maintenance etc.
- vi) DBRT student and Architect student Mr.Sharvey conducted survey of water stream in Pabal village. It was part of project of Mr.sharvey. We have given him assignment under 'Fab Village' plan of Vigyan ashram.
- viii) Super 20 Girls : Wiki Project and computer & Fabrik class
- Students completed scanning and cropping of 600 pages of Ranade Dictionary.
  - At present there are 3 students for Fabrik classes.
  - Pooja completed 1000 wikiMarathi edits
  - Students completed typing contract of IBT books in stipulated time.
- viii) More information @ DBRT students on : <https://vigyanashramalumni.wordpress.com>

## **F] Update - Technology development & Design innovation centre:**

i) **Braille Printer** : DIC student Mr.Avinash Pudale has been able to replicate the braille printer designed by Hughes in France. It is now working well. At present the program works with English language. Our aim is to make braille for Marathi / Indian language. Details are on <https://avinashpudale.wordpress.com/braille-printer-2/>



**Braille Printer**

ii) **Fab academy 2018** : Arefin completed his major

Fab lab assignments and return to home country Bangladesh on 21<sup>st</sup> May. Similarly, Ugyen return to Bhutan on 8<sup>th</sup> May. They will attend remaining classes from Fab Labs in their country. Other students are working on their assignments and projects. Most of the students prefer to work at night and hence Fab Lab is now kept open throughout the night. As part of 'Make a Machine' assignment, they made a rotating arm ( <https://www.youtube.com/watch?v=3pL6N1a9G7k> ) You can see current progress of all these students here: <http://fab.academany.org/2018/labs/fablabvigyanasharm/>

iii) **Summer Camp 2018:** Fab Summer camp was organised on 17<sup>th</sup> And 18<sup>th</sup> May 2018. 9 students from Pune learned 3d printing, Sewing machine, Laser cutter, Vinyl cutter and Electronics -Arduino and programming. They built Musical Hand-gloves, Walking robot, Wearables, Pin ball game. It was Happy Making workshop!

iii) **DIY Lab @ JPNC** : Due to summer vacation, DIY Lab organised many workshop and got good response from the students. Following workshops were conducted this month

- i) Paper circuit Making : 5<sup>th</sup> May
- ii) Learning 'Scratch' programming : 6<sup>th</sup> May



- iii) Drone Making on 19<sup>th</sup> and 20<sup>th</sup> May
- iv) Drone Making on 26<sup>th</sup> and 27<sup>th</sup> May
- v) Tod-Fod-Jod workshop : ongoing
- iv) DIC Intern :** Kiran Kadam and Avinash Pudale joined DIC as fellows.

**v) Visit and Training:**

- a) Dr.J.B.Joshi, Dr.Ramesh Chandra, Dr.Patankar visited Pabal campus on 6<sup>th</sup> May. Objective of the visit was to review important research project especially drying apparatus, dome dryer and composting. They also guided DIC students on further work on drying technology.



**Pooja made Dome using aluminium sheets**

- b) Yogesh visited Sahyadri Farm (Largest exporter of grapes and Farmer producer company) in Nasik on 27<sup>th</sup> May.

**G] Other tit-bit :**

- i) Suhas gave talk about Fab Lab at Jnan Prabodhini on 17<sup>th</sup> May
- ii) We are thankful to Mr.Sandeep Godase and Mr.Anil Date for their donation to Vigyan Ashram.
- iii) Yogesh gave talk in Youth camp organised by Sane Guruji Smarak samiti in Amalner on 28<sup>th</sup> May.
- iv) Yogesh gave presentation on Affordable agriculture lab organised by IEEE on 22<sup>nd</sup> May at Agriculture College, Pune.



**Status of Hostel Construction**

- v) Vigyan Ashram alumni success story was on front page of Indian Express 12<sup>th</sup> May. Please see the link : <http://epaper.indianexpress.com/c/28603132>

v) Visitors to Pabal campus – 38 ; [www.dsttara.org](http://www.dsttara.org) – 861 (New-752, Repeated – 109), [www.vigyanashram.com](http://www.vigyanashram.com) – 2063(New visitor –1434 Repeated-629) ,[www.vigyanashram.wordpress.com](http://www.vigyanashram.wordpress.com) –2153 (Visitor- 1432 Viewers-721 )

- vi) Weather record – Rainfall – 0 mm (Total 882 mm) ,Max temp- 41 °C, Min Temp – 22°C , Humidity – 34%, Water height in well – 6.7 mtr.
- vii) Energy consumption record- Electricity unit – III Phase- 1144 unit, I Phase- 677 unit. Quality of power: Data logger is not functioning hence details are not available.
- viii) Two wheeler usage : 687 kms



ix) Biogas consumption – Dung used- 106 Kg + 80kg kitchen waste, Gas produced- 17 m<sup>3</sup>.

### Data Report :

[https://drive.google.com/open?id=0B\\_Jk2xLqAXjckVnWFA4OE9hUHUyREFqVHRoSW5Ccm80R2FN](https://drive.google.com/open?id=0B_Jk2xLqAXjckVnWFA4OE9hUHUyREFqVHRoSW5Ccm80R2FN)

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 :



Grow bags farming : Vertical farming



Manufacturing dome kit



Summer camp @ chintnar (Dantewda)



IBT workshop @ Narayangaon





Kailash Jadhav @ Suzlon Foundation CSR function



IBT Instructors training



Summer camp students showing Embroidery job



Summer camp @ Pabal



IBT Instructors training @ Pabal



Fab Academy student Arefin demonstrating his project.