

# Vigyan Ashram Status Report

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### A] Welcome ! DBRT batch 2017-18

New DBRT batch started their training on 10<sup>th</sup> July. This batch has 56 students including 3 girls. Students are from Maharashtra, MP, Gujarat, Andhra, Tamilnadu & Chattisgarh. We have done some changes in the course structure & syllabus. Beside that each student is assigned to a mentor other than DBRT instructors. We expect mentors to talk to their student's atleast once in a week. This will help to resolve personal and social difficulties among students. Dixit Aaji started English and language class in the evening. We are thankful to Asha for Education, EATON foundation, Tata motors, SPA Education foundation for supporting DBRT program over the years.



Inauguration session of DBRT on 10th July

### B] Open House Exhibition on 30<sup>th</sup> July

Open house exhibition was organized on 30<sup>th</sup> July on occasion of 14<sup>th</sup> anniversary of Dr.S.S.Kalbag.

Following were some of the important highlights of open house exhibition –

- Various technology development projects e.g bio-drum for waste processing, solar operated laser cutter, new model of sanitary pad incinerator, rice de-husking machine etc were exhibited.





- VA alumni Shri.Dyaneshwar Khaire was invited as a chief guest for the program. DBRT student Shri.Tarasign (DBRT 2007) was guest of honor.
- This years 'YUVA Udyojak' award was presented to Gaurav Salunkhe (DBRT – 2011) for his start-up enterprise in 'Metal fabrication' workshop @ Pachgaon (near Shrirampur in Ahmadnagar district) and 'Best IBT School' award was given to 'Vadachapath high School (Dist-Sindhudurg).
- Exhibition was attended by 2000+ visitors. It includes 1500 + School students from 30 different Schools & 500 + individuals.
- IBT Schools : Nine IBT schools viz Chikhhalgaon (Dist-Ratnagiri) , Vadachapath (Dist-Sindhudurg), Gavdevadi (Dist-Pune), Deepghriha academy (Chauphula, Dist-Ahmadnagar) exhibited their projects/products made in the School.
- DBRT students from Home & Health depart earned community service of Rs.5000.



**Exhibition: IBT Project ideas**

**C] IBT Updates:**

i) First trial IBT lecture using Video Conference was done With Bhandari High School Bhandari, Malvan on 15<sup>th</sup> July. Dr.Yogesh Kulkarni conducted class on 'selecting project ideas'. We are planning to conduct online class every Saturday on various topics. Response from the first lecture was encouraging.



**Inauguration of IBT @ Katraj school**

ii) Sumati Balvan School, Katraj joined IBT network. A formal inauguration program was held on 14th July. The program is supported by L&T Infotech. IBT workshop was inaugurated at the hands of Ms. Kalyani Mujumdar, CSR Manager, One step- L&T Infotech Ltd. along with Dr. Shrayu Gholde, Mr. Nitin Ghole and Mr. Sachin Punekar (Vigyan Ashram), School Principal, and IBT coordinator Mr. Siddesh.

iii) Highlights of community Services:

- a) Kitchen garden activity was started in 7 schools (sakri,



**Bori High School : Learning While Doing**



Brahmanwel, Jat, Ghatnandre, Sinnar, Nandurbar, chakla). Seeds were given to 450 students to make nursery at home.

- b) Chas school students repaired 22 benches in engineering section. Value of community service is approx.Rs.4500/-
- c) Yogesh visited Khiroda IBT School on 8<sup>th</sup> July and review the progress. He also gave a talk in School Principals educational conference held on the occasion of anniversary of Late Madhukarrao Chowdhary.

#### D] IBT CG

- Dantewada Dist administration gave tender notice for providing technical support to IBT program. Accordingly, we have submitted tender. Sachin gave presentation in front of the committee on 25<sup>th</sup> July. We are expecting order for implementation of IBT program in 17 schools of Dantewada, CG for year 2017-18.



Agri activity in porta cabin school

- Sachin visited Naupada (Odisha) IBT schools on 26<sup>th</sup> July. He introduced Selco Foundation to 2 schools from Nuapada district to start selected activities of IBT program.
- IBT instructors' meeting was conducted on 7<sup>th</sup> July at Bijapur. Planning for next 2 months was done in the meeting.
- Preparing land, ploughing and sowing of seeds was done in 8 porta cabin schools of Bijapur district.

#### E] DBRT Updates:

**i) Renovation of Electric Lab:** We are upgrading our electric lab with the support of M/S Megger (I) Pvt Ltd. We have ourselves done fall ceiling of the lab. New tables and work benches are fabricated in ashram. We have also purchased new tools for the lab.



Students working on Falls ceiling of Electric Lab



Treatment of cow

ii) Agriculture Section : With the arrival of monsoon, agricultural activities are in full swing.

- Preparation of plot, ploughing and seeds sowing was done.
- Azolla bed was prepared.
- Farm tank leaks were repaired.
- Chilly, Elephant grass for fodder was planted.

iii) One Goat kid died on 23<sup>rd</sup> July 2017.

iv) On World Youth Skills Day (15 July 2017), Vigyan Ashram conducted Skill Development workshop for 70 construction workers along with DBRT-Engineering students. It was done in association with Birla, Ultratech and Rajuri cement companies. During training they have learnt about basic construction Technics with Cement, concrete, sand composition and block formation.

v) Asha for Education volunteer Mr.Sri Hari visited ashram on 30<sup>th</sup> July. This was part of annual field visit for Asha's support.



Construction workers training



BRIDGE course completion

vi) First batch of Bosch BRIDGE Training completed their training on 31<sup>st</sup> July 2017. There were 17 girls from Pabal College for training.

**F] Soil Heath card mission:** During July, 3890 samples were received from 12 villages of Pabal circle. Out of which 743 samples were tested for various required parameters. We have also changed our testing kit (mini lab equipment) with new added parameters like Manganese, copper, Lime etc. Now we can analyze 15 parameters of soil instead of 10 parameters in earlier kit. Work on online data entry is also started as per guidelines given by district soil analysis lab.

### G] Update - Technology development & Design innovation centre:

a) Initial Success for DC Laser cutting machine: Supriya completed laser machine which can work on DC battery. It has 2.5 watt laser source and run on





battery with 12V and 7 Amp-hr. This machine is entirely made in the fab lab. It costs approx. Rs.30,000/-. This machine is capable of engraving and cutting on card board and will be useful for making small school projects with precision. The machine was displayed during open house exhibition. It will be under testing for one month before field trials.

b) Update on: Aquaponics – After analyzing results of our earlier trials, we have found lower temperature of water (below 18 C between November to February) are reasons for our failures. Dr.Arun Dixit and Ranjeet visited 'R K fish farm' near Kolhapur on 16<sup>th</sup> July for studying suitable fish species for farm tank & aquaponics system. Based on study, we have planned to deepen fish tank and cover it with polyhouse paper (by extending existing polyhouse structure).

c) Incinerators to DST – One unit of incinerator was sent to DST (New Delhi) with its poster for exhibition. Trial has also started on new model of incinerator based on 'Pyrolysis' principle. This model has less emission & power requirements.

d) Five students of Lovely Professional University completed their Biogas training for 1 month on 14<sup>th</sup> July. Their work can be found on the blog :

<https://vertoprojectva.wordpress.com/>

e) Bio-Drum : New version of bio-drum (V3) with 235 lit volume is under prototyping stage. Trial run was done in the last week of July. Second design for single family was proposed by IIIT intern. A prototype is modified accordingly. New design looks promising with easy of operations. Our experiments in Saswad garbage depot helped Saswad corporation to get 'Harit Brand' from Govt of Maharashtra for its compost. The News came in the Sakal News paper on 19<sup>th</sup> July.

<http://www.esakal.com/pune/pune-news-saswad-harit-compost-brand-approved-60452>

f) First few attempts to develop mushroom farming using geodesic domes failed due to heavy infection in the month of July.

g) Suhas visited New Delhi on 23<sup>rd</sup> and 24<sup>th</sup> July to attend meeting of 'Fab lab India Network'. This meeting was organized in presence of Dr.Neil Greshenfeld.

#### **H] Important Visitors to ashram :**

i) Mr.Ramesh Panse and team visited VA on 13<sup>th</sup> July to discuss collaboration for starting VA programs in Thane tribal area.

ii) Team of scientist from BARC along with Dr.J.B.Joshi visited ashram on 19<sup>th</sup> July. Objective is to conduct field testing of solar technologies



**Ranajeet at R.K Fish farm**



**Interns of Lovely Professional University**



**Panase Sir at Food Lab**

developed by BARC. Dr.Joshi sir also guided us in development of dryer.

As a follow up of this visit, Dr.Arun Dixit and Mr.Ranajeet visited BARC on 23<sup>rd</sup> July to study various technologies made by BARC and available for dissemination especially technologies in waste management through composting & bio-gas production.

iii) Dr.Shaligram, Registrar of Savitribai Phule Pune University visited ashram on 26<sup>th</sup> July. Objective of the visit is to review DIC projects.

### **I] Entrepreneurship Development Program:**

i) Mr.Pawan Soni resigned and relieved w.e.f 29<sup>th</sup> July. We wish him all the best for his future endeavours.

ii) Mr. Amin Rashid Momin started Paper Bowl Making unit in Kawathe. He got training under Entrepreneurship development program. He learnt about technical intervention and business development skills.

iii) Mr. Rushikesh Fullari, undergraduate B.Sc. computer science, youth took initiative towards entrepreneurship. He started freelancing web development service for local traders.

iv) Mr. Sukhdev Malpote started flowring culture and Polyhouse unit in 0.25 Acre land, and retailing flowers of revenue approximate Rs.35,000/- per month.

Details are on <https://ruralstartup.wordpress.com/>

### **J] Other tit-bit :**

i) We have received donation from Mrs.Shanti Kalbag and Mrs.Vasanti Masurekar. We are thankful for their support. Praj Industry donated scrap material for students practical / skill training on 21<sup>st</sup> July. This scrap includes around 80 Kg of PVC pipes , 40-50 Kg of wood and 50-70 Kg of metal (MS) pipes.

ii) Interviews for DIC interns were conducted on 17<sup>th</sup> July at Pabal.

iii) Yogesh visited IIT to discuss proposal of Maker Lab program for schools.

iv) Yogesh left for Santiago,Chile on 30<sup>th</sup> July to attend Fab13 conference.

iv) Weather record – Rainfall – 145.6 mm (Total 124.9mm) ,Max temp-25°C, Min Temp – 25°C , Humidity – 79%, Water height in well – 4.5mtr .

v) Energy consumption record- Electricity unit – III Phase-690 unit, I Phase-380 unit. Quality of power: Number of interruptions: 22, Normal voltage: 96.8 %, No supply: 2.66 %, low voltage: 0 %, high voltage : 0.51 % , Data not recorded :0 %

vi) Biogas consumption – Dung used- 184 Kg, Gas produced- 9.28 m<sup>3</sup>.

vii) Visitors : [www.dstattara.org](http://www.dstattara.org) – 634 (New- 541, Repeated –93 ),[www.vigyanashram.com](http://www.vigyanashram.com) – 1906 (New visitor – 1325 Repeated-581) ,[www.vigyanashram.wordpress.com](http://www.vigyanashram.wordpress.com) – 2610 (Visitor-1722 Viewers-888)

### **Data Report:**

[https://drive.google.com/open?id=0B\\_Jk2xLqAXjcNfNRaldhbTjYwZCUGhTUXBFSHVzVENDclpV](https://drive.google.com/open?id=0B_Jk2xLqAXjcNfNRaldhbTjYwZCUGhTUXBFSHVzVENDclpV)

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

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



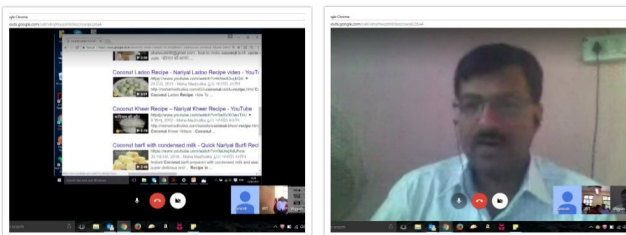
**Photo Gallery:**



Kitchen garden @ IBT :plumbing work in progress



Visitors at VA on 30<sup>th</sup> July



First IBT lecture using video conferencing



Suhas with Dr.Neil at New Delhi



Visit of JSPM Engineering students on 21<sup>st</sup> July



Land preparation at ashram

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