

# Vigyan Ashram Status Report

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### A] ISBA – 2016 Conference on ‘Powering Start-up Enablers’:

Yogesh and Ranjaet participated in “The Indian STEPs and Business Incubators' Association (ISBA-2016) conference” on 10<sup>th</sup> & 11<sup>th</sup> September. Vigyan ashram participated in the conference as “Rural Start-Up Incubator” along with other DST TARA-CORE support groups. We have exhibited technologies developed by us. Yogesh also participated in the Panel discussion on “Scaling up DST-SEED-TARA CENTERS to align to national start-up mission: building linkages”.



### B] Electrical Wiring Training :

Certificate distribution function of ‘Basic electrical wiring -Domestic’ course was held on 14<sup>th</sup> Sept at Aurangabad. The course was conducted in collaboration with local NGO Paryaya. Megger representative Mr. Anant Waghchoure was chief guest for the function. Total 16 trainees completed the course. M/S Megger has supported the course through their CST. They have also given tool kit to first three best performing students.



Megger (I) Pvt Ltd donated us advanced electrical tools such as Digital Multi-Meter, DCM310 clamp-meter, Voltage tester (TPT320), Insulation and continuity tester, Earth tester. We are using them to develop content for advanced electrical course.

### C] STEM training for school Students:

We have launched project making workshop using 3D printing, microcontrollers for students of Pune Municipal Corporation school students. M/S EATON foundation is financially supporting these camps. We have conducted workshop with 3 different Schools & 61 students at DIY lab Pune. Students learnt basic electronics, 3D designing & printing, Arduino programming etc. They did project like Ganesha decoration, automated School bell, motion sensor etc.

### D] DBRT Update:

- DBRT students practiced 'Barchhi Dance' for Ganesh procession. They performed in procession against order from various Ganesh Mandal and earned Rs.31500. The money earned will be used for Picnic expenses during the year.
- DBRT workshop students fabricated goat farm shed of 1800 Ft<sup>2</sup> for 'Deaf and Dumb school' and did fabrication work on order while earning total community service of Rs.14171 as community service.
- Workshop department student prepared wooden cupboard for FABLAB.
- Students in Energy & Environment department learnt 'motor re-winding' skills while repairing 2 different water pumps motors and earning community service of Rs. 4994/-.
- Short term training program on 'Basics of food processing & value addition' was conducted during 12th to 24th of September. Training was attended by total of 19 participants including 2 instructors from Jashpur IBT School. Students processed 75 Kg Amla, 10 Kg tomato, 5 Kg Guava and 5 Kg vegetables to prepare various processed products. They also exhibited them in Pabal weekly market as marketing activity.
- In FabLab students learn basics of arduino programming, lesser cutting, 3D scanning. They build various Ganapati decoration kits.
- 3 days training workshop on "advanced goat farming techniques" was conducted during 26 to 28<sup>th</sup>. Total of 8 farmers and 13 DBRT students participated in this training workshop to learn



Shed in progress for school in Pabal

advanced techniques as fodder management, vaccination, calculating Cost-Benefit ratio etc.  
For Details of DBRT : <https://vigyanashramdbrt.wordpress.com/>

#### E] Technology development update :

- Suhas has installed his Polyhouse precision monitor unit at Polyhouse of Mr.Anand Gosavi on 25<sup>th</sup> Sept. Suhas visited Pimpalgaon Jali and met polyhouse farmers and discussed their needs in weather monitoring system. Similar instruments were installed at Khairenagar and VA polyhouse.
- Swami Kelkar is working on Rice planter. He has done modifications in seedling hopper and planting fork. This has substantially improved rice planter's efficiency. Now we are working on improving it further for increasing efficiency and adding automated planter drive for avoiding human errors.



- Prachi Samarth completed work on first working prototype of Hackberry (Prosthetic) Hand. We are testing this prototype with probable beneficiary from Pabal and taking his feedbacks for further improvements. More about it on <https://vadic2016prachisamarth.wordpress.com/projects/>

- Trial of Aquaponics started with re-designed fish tank, bio-beds, and water circulation system. At present we are rearing 800 fingerlings (1 gm each) of mono-sex tilapia with 10000 lit fish tank and 350 Ft<sup>2</sup> of bio-bed system. Dr.Vivek Vartak (Research Scientist @ Khar Land research station, Dr.BSKKV, Dapoli) visited Pabal on 6<sup>th</sup> September to guide us on technical aspects on fish rearing in Aquaponics and cage farming system in farm tank.
- Water Carryo- A wheel barrow, for carrying water to the distance is designed & fabricated on demand from Mr.Dhananjay Mahajan (Jahwar, Palghar). This carrier can carry 40 lit of water (4 Pots) with minimum efforts. This has adjustable handle for easy to turn & operate, weight balance for sturdy & stable load. Approximate cost of each unit is Rs.2000. The unit was send for field testing.
- Yogesh & Pawan visited Pokhari village near Bhimashankar on 7<sup>th</sup> Sept. We had a discussion with Sarpanch and gram panchayat members of village. We are exploring possibilities to start technology based enterprises using locally available material in tribal area.



- Yogesh visited Delhi on 21<sup>st</sup> Sept to present proposal on 'Dissemination of Fodder Technologies to BPL families' at FICCI office. We have proposed the idea for Millennium Alliance competition and selected for pitching round. We have made short video clip on technologies practiced at VA.

<https://www.youtube.com/watch?v=rs9SMOPDxrs&feature=youtu.be>

**F] IBT Updates: –**

**i) IBT Maharashtra -**

- IBT students of Bhandari Highschool, Malvan (Sindhudurga) collected approx. 300kg 'निर्माल्य' in Ganesh festival from sea shore and converted it into very valuable vermin-compost. These students' efforts and vermicomposting demonstrations are well appreciated local newspapers and TV channels. (video link -

[https://www.youtube.com/watch?v=bcszIcM9\\_aA](https://www.youtube.com/watch?v=bcszIcM9_aA))

- Class 10<sup>th</sup> IBT students of Dyan Ganga Vidya Niketan, Manchihil (Ahmadnagar) prepared a hydroponic fodder production unit in their School as a Science project. This 100 trays hydroponics unit is capable of producing of 70 Kg/day fodder production. Students are recording effect of hydroponics fodder on milk yield. Primary results shows average increase of 2.5 Lit/cow.

- IBT students from 10<sup>th</sup> class of New English School, Baragaon Pimpri built parking shed of 32 ft length, 22 ft width and 8 ft height for school costing Rs.15000.00

- The IBT Students of S.S.D.D Highschool, Vadachapat has started 'IBT Canteen' in the school. They have earned Rs. 560 in just 4 days. School is planning to give management lessons and soft skills training through this activity.

- The IBT students of Shri. Hanuman New English School, Valsang planted Moringa (Shevga) on 30mtr\*30mtr plot. They have install drip irrigation system under 10th std. project.

- IBT labs was inaugurated at Kulswami Khanderaya Vidyalaya, Hiwara School on 14<sup>th</sup> Sep, 2016 (ILFS supported program).

- Testing of Open Education Resources (OER) on Calculation of Total Digestive nutrient (TDN) , cultivation of Azolla & preparing study lamp was conducted in Shri.Sitaram Vidyalaya Khardi and New English School Anavali.

For updates on School activities please visit - <http://ibtblogs.blogspot.in/>

**ii) IBT Chhattisgarh –**

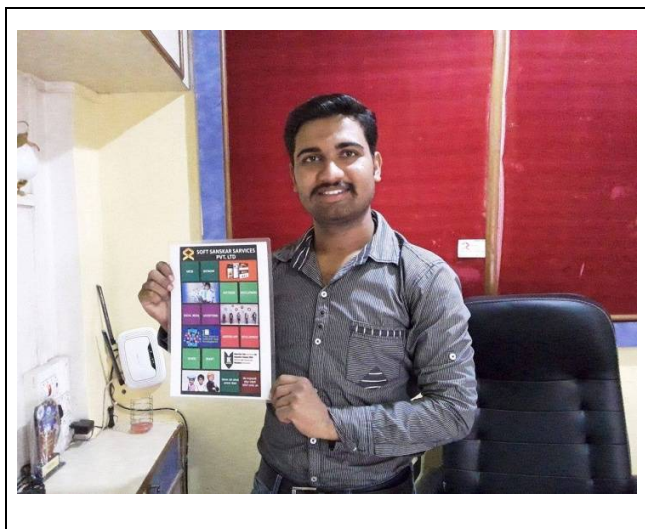
- 12 IBT scools from Bijapur and Dantewada district started Kitchen garden activity. They have harvested approximately 150KG of ladyfinger, 150KG bottlegourd, 60KG of Kumda and 80 Kg of brinjal and used in their kitchen.



- Yogesh & Rajshekhar visited Raipur on 16<sup>th</sup> Sept. to meet various Govt officials of ICDS scheme. This meeting was organized by UNICEF, Chattisgarh. They also met protection home run by ICDS. Yogesh also met Director of Livelihood college scheme.
- Funding support for schools from UNDP and IPE Global for schools in Odisha ended in June. It was expected that Govt SC & ST dept will continue their support. But it is stuck in bureaucratic delay. Therefore we have decided to keep program on hold for the time being.

#### G] Entrepreneurship Accelerator:-

- Mr. Mayur Patole started his IT based start-up at Rajgurunagar (Pune). His firm Soft Sanskar Pvt. Ltd. provides services such as website & app development, social media marketing for rural enterprises. SoftSankar has also developed online directory [www.khedmart.com](http://www.khedmart.com) of local businesses.



- Mrs. Sangeeta Vahval started her hotel & catering business at Shingavi village near Nirgudsar (Ambegaon). Mrs. Sangeeta attended 'Rural Enterprise management' training workshop during March 2016.

- Mr. Ashok Jagtap proposal for starting 'Welding Fabrication' is accepted for crowd funding. Ashok is IBT instructor at Hingangaon School and starting his enterprise at Shindevadi village near School. His wish to raise Rs.1 Lakh for his new venture. His proposal is up on Rang-De portal - <https://www.rangde.org/borrower/microcredit/india/maharashtra/ashok-shivaji/54414?isD2i=false>.

#### H] Other tit-bit –

- I. Pawan & Supriya attended training workshop on 'Basics of Financing management' by Dr. Anil Lamba's' at Pune on 28<sup>th</sup> Sept.
- II. Team from Kerala Fab Lab visited VA on 27<sup>th</sup> Sept. It was part of their study tour.
- III. Yogesh visited Ajay Kumar Garg Engineering College, Ghaziabad on 20<sup>th</sup> Sept. The visit was to guide them on setting up of Fab Lab.
- IV. Yogesh visited Manav Vikas Commission, Aurangabad on 14<sup>th</sup> Sept to discuss opening of 5 to-d-Fod-Jod centers and D-I-Y lab in district with low human development index.
- V. Dr. Arun Dixit joined technology development team at VA from 1<sup>st</sup> Sept. He will be based at Pabal and work on project related to water & waste management, food processing. Dr. Dixit is PhD in chemistry from NCL and carries research experience of more than 20+ years.
- VI. Students from Awasari Polytechnic College and Marathwada Mitra Mandal's Polytechnic College visited Pabal Campus as study tour and learn DIC program.
- VII. Weather record – Rainfall – 127.51 mm (Total 333.18 mm), Max temp-23.46°C, Min Temp – 9.46°C, Humidity – 84.13%, Water height in well – 7.01 Meter.

- VIII. Energy consumption record- Electricity unit – III Phase -1328, I Phase -956. Quality of power :  
Number of interruptions : 129, Normal voltage : 76%, No supply : 19 %, low voltage : 5 %, high voltage : 0.0%
- IX. Two wheeler use : 741 kms
- X. Biogas consumption – Dung used- 766 Kg, Gas produced- 27.58 M<sup>3</sup>.
- XI. Total visitors to [www.vigyanashram.com](http://www.vigyanashram.com) – 1693 (Visitor – 1248 Viewers- 445)  
[www.dsttara.in](http://www.dsttara.in) : Total Visitors: - 1641 (New-1339 , Repeated –346 )

Data Report:

[https://drive.google.com/open?id=0B\\_Jk2xLqAXjccFRwU0VhUTVHcIE](https://drive.google.com/open?id=0B_Jk2xLqAXjccFRwU0VhUTVHcIE)

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### Photo Gallery:



DBRT students working in FABLAB for Ganesha Decoration



Food product stall at weekly bazaar



IBT Bargaon Pimpri School students planting Moringa



IBT Karli (Dandewada) students preparing shed in School



'Advanced technique in Goat farming' training workshop



Technology exhibition stall at ISBA conference Pune



Certificate distribution : Electric course



Yogesh visiting AKG Engineering college, Gazhiabad- upcoming Fab Lab

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