

Vigyan Ashram Status Report

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A] ART Day @ 2nd anniversary of Amma!

We observed 18th March as a 'Art Day' on the occasion of 2nd anniversary of Mrs. Mira Kalbag (Amma). In the morning, we observe 15 min meditation, followed by sharing of memories of Amma by VA alumni. We learn to do embroidery, screen printing, paper bags, up cycling of old cloths using laser machine and making of tattoo. Fashion designer Ms Apurva Pawar and Beauty expert Mrs Megha Satpute were the main resource person. Nearly 120 participants including VA staff, students and 50 schools students from nearby Schools enjoyed a day with various hand-on activities.



B] Model IBT Schools review meeting :

An IBT Model School project headmasters meeting was conducted on 29th March at Pabal campus. Meeting was attended by 15 representatives from 9 schools. Mr. Vinayak, Kelkar (Lead Corporate Sustainability, Praj foundation) guided schools about role & expectation of Praj Foundation in IBT

program. Dr. Yogesh Kulkarni guided participants on future prospect of IBT program & support available from Vigyan ashram.

Hirkani Vidyalaya
Gawadewadi
(Ambegaon, Pune),
New English Schools
Bargaon Pimpri
(Sinner, Nasik) and
Lokmanya Tilak



Vidyamandir Chikhhalgaon (Dapoli, Ratnagiri) were awarded with 'Best IBT School' award based on their performance for given educational year.

C] Technology Development & DIC Progress :

i) **Water Pipe Line, Polyhouse reconstruction and Grey water system work (JBGVS) –**

- Excavation and water pipeline laying work completed during this month. We used 82 PVC pipe (6 Mtr each) of 127 mm diameter to connect it with main leased pipe line. This pipeline will help to store around 40 Lac lit water in our farm tank for agricultural use.
- Kitchen grey water recycling system construction was completed. Work of new drainage line, settler tank, sludge & oil separating arrangement, connecting chambers were constructed.
- Polyhouse reconstruction work: Foundation layout, fixing of columns & fabrication of traces fabrication were completed.



- #### ii) **Installation of Autofarm** – One unit of Autofarm is installed at KVK, Narayangaon. It records temperature, humidity and soil moisture and activate controls accordingly. KVK will use it in their strawberry farm & give us feedback for further development & dissemination to farmers.



AUTOFARM @ KVK, Narayangaon

- #### iii) **Mahua Ladoo** - A recipe was standardized for making ladoos from Mahua flowers. It was developed against requirement by M/S Ecovan Self-Reliant Women Farmers Producer Company Ltd. Kurkheda, Gadchorili. We are helping this producer company to develop innovative product from Mahua

flowers like ladoo, chikki, ready mix halwa etc. The ladoo's were very well accepted for its taste, flavour and nutritional value. We will be providing training & enterprise establishment incubation support to farmers / SHGs in collaboration with MSRLM, Gadchiroli.

- #### iv) **Development of composter & Sanitary pad incinerator-** Mr.Anil Gosavi & Mrs.Ujwla Gosavi of Climber Enviro Systems LPP (Katraj Pune) visited Pabal campus on 2nd of March, to guide DIC

students on various technology development project with respect to 'industrial manufacturing process' . We also discussed modification required in housing society level composter and sanitary pad incinerator technology.

- v) We have submitted Rice dehusking machine for Global Innovation Exchange. You can visit our entry on : <https://www.globalinnovationexchange.org/innovation/rice-dehusking-machine>
- vi) We have received Plasma Cutmaster A 40 (as a replacement to faulty machine). It was installed on 1st March. We have also purchased stabilizer for the machine.
- vii) We have participated in the Tech-Festa exhibition at Alamuri Ratnamala Institute of Engineering & Technology, Shahapur Thane on 14th and 15th March. DIC and DBRT students exhibited our technologies in the exhibition.

D] IBT Update :

- LTI Volunteers @ IBT school : Students of IBT Chinchwad School learnt to make emergency torch, water level indicator, making of 'eco cooler' from used pet bottles. These activities were conducted by Seven LTI infotech employee volunteers for 24 IBT students.



LTI volunteers @ Chinchwad IBT

- IBT Students of Katraj School made a 'solar cooler cap' in their Energy & Environment section. Its a regular cap with solar cell and DC motor based fan costing @ Rs.250/ cap. It's been appreciated by many visitors & school administrations. Students sold 8 such caps as a part of community service.

- 3D printing workshop was conducted for 90 IBT students from Mukhai, Kendur, Nimgaon, Nighoj, Amboli & Kohinde IBT Schools. It was one day training workshop for learning basic CAD designing & 3 D printing technology.

- 'A 360 Degree' review meet was conducted for Suzlon CSR supported IBT School program @ Bramhanvel village in Nadurbar district. This review meeting was



Terrace garden @ Shirwal IBT

attended by various stakeholder of project including parents, villagers and other Suzlon supported NGO partners of the area.

- Team of workshop department in Sevadhaam Ashram Malegaon School (Maval, Pune) fabricated signage boards for Schools of worth Rs.5000 while learning metal fabrication & painting skills.
- Students of IBT School in Dhamari village (Pune), repaired their farm tank for water storage & did fencing work of worth Rs.7000
- Dr.Yogesh Kulkarni & Ganesh Pingle visited Bhivadi and Shirval IBT School on 2nd March to review progress of model school project.
- Vishal attended meeting in SSC board to prepared books for IBT- MSFC program from 25th – 27th March.

E] DBRT News :

- On 14th March, DBRT workshop department students installed 2 units of solar water heaters while learning skills of plumping, fabrication of water tank support structure, installation of vacuum tube based solar water heater. This heater will serve hot water requirement for 32 students in newly constructed boys hostel building. These solar heaters are installed with financial support of Kusum Soham Parivar, Pune,



- Workshop department constructed new electrical supply room in 36 Ft². Older room was very cramped & was not able to accommodate new wire connections / switches. Students learnt metal fabrication, brick laying, mortar mixing etc skill while constructing this room. Total cost of construction was Rs.12131 including students community service earning of Rs. 2500.
- DBRT agricultural students visited Artificial Insemination centre in Pabal village on 8th March to learn basic skill in health care of Animal husbandry. On 12th March, they also visited progressive farmer in Mr.Dhanjay Sukre (Mukhai village) to demonstrate Azolla cultivation technique and learnt agricultural practices.
- DBRT agricultural students started



DBRT Agricultural students visiting farmer in Mukhai village as field study tour.

new poultry farming batch on 14th March. They brought 200 chicks of *Kaveri* breed. They will raise these chick for next 2 months to learn poultry farming skills.

- DBRT students completed Pooran mix order for 'Gudi Padwa' and sold to kitchen. They earned community service of Rs.3321 while selling various food products like Peanut chatany (2Kg), bakery products (27 Kg), Tamarind sauce (11 Kg) etc.
- Students in Energy & Environment section learnt screen printing, motor re-winding & DOL starter repair skill while earning community service of Rs.5464 while doing various electrical maintains & fitting in campus.
- New hostel construction video is available on Vigyan Ashram's you-tube channel : <https://www.youtube.com/watch?v=9hNnQLXDTPk>
- We have celebrated Holi with natural colours made in ashram. Harshada and team made natural holi colours from Rose petals, Neem and turmeric. Procedure is documented on <http://sewembro.blogspot.com/>
- Harshada gave final presentation of Fabrik Academy course on 28th march. Her project involves 'Cotton to fabric cycle'. It includes Natural dyeing using onion skin, 3d printing on fabric, E-textile and laser cutting. All documentation is available on <https://class.textile-academy.org/2019/harshada.raut/>



Natural colors made in ashram

F] DIY Lab and Fab Academy Progress :

- A training workshop was conducted for UWC Mahindra college students during 3rd to 8th March. Total 17 students participated in the workshop to learn digital fabrication skills like 3D printing, laser cutting, basics of programming etc. They made prototypes for products like Coke dispenser, colour detector, vertical garden, composter etc.
- Apart from these 30 students from Gram-Mangal School (Pune) visited DIY to learn skills in basic electronics programming etc in regular on-going training sessions.
- Fab Academy students completed their assignments of computer-controlled machining, Moulding and casting, embedded programming and Input devices. They also fabricated various wooden articles using 'shopbot machine' at COEP Fab Lab and Muktangan exploratory in Pune.



FAB academy students learning 'shopbot' machine @ COEP fablab, Pune

G] Launch of new websites

We are pleased to launch our new website for our documentation. These new websites will host all blogs of students and their projects. Each student can submit their assignment online and will be available online. We will also put various technology development work, student intern project, student alumni success stories. Following are new website links as -

<http://www.vigyanashram.blog/> - Latest updates on technology development, field trials & trainings.

<http://vadic.vigyanashram.blog> – Latest updates on DIC students projects/ internships

<http://ruralstartup.vigyanashram.blog/> - Latest updates on VA alumni's, success stories.

<http://alumni.vigyanashram.blog/> - Updates on DBRT students projects, profiles etc.

H] Other tit-bits :

i) Women's Day was celebrated in campus with full enthusiasm & enjoyment. VA ladies team draw a beautiful painting showcasing their strength & unit on Ladies hostel wall.

ii) Solar Net metering – We have installed 6.5KW solar roof top, on grid system. Installation was completed on 28th March. We have submitted meter for approval to MSEB. After their inspection, we will be able to use solar electricity on campus. We will be able to supply excess generation to grid as well. This system is sponsored by Eaton foundation.

iii) Agrowon article (Gramin Udyojak) – Article on 'Domestic Egg incubator enterprise by Mr.Randrabhaga Pharad (Kendur) was published on 4th March. While on



Women's Day Celebration

22nd March, article of 'Agricultural tools fabrication by Ganesh Pawar (Pargaon, Ambegaon) was published in Gramin Udyojan supplement of Agro-won newspaper.

iv) Pratik Purohit conducted career counselling session through video conferencing on 4th March for DBRT students.

v) We are thankful to following donors for their support to VA : Mr.Shrirang Deshingkar and Dr. Vasant Masurkar.

vi) We have participated in Global Giving Accelerator fund raising campaign for its educational program. It calls for donors to donate to Vigyan Ashram. You may visit website link : <https://bit.ly/2Hzv9rH> for foreign donation. For donation in Indian currency : <https://bit.ly/2F7FBVE>

- vii) Abasaheb Patanakar (workshop department instructor) and Vicky Chaudhari (Coordinator , Entrepreneurship acceleration) resigned from their jobs for seeking better opportunity in their respective field. We wish them best luck for their future endeavours.
- viii) Weather record – Rainfall – 0 mm : Total 350mm (June to Feb) ,Max temp- 39 °C, Min Temp – 16.5°C , Humidity – 38 % , Water height in well – 7.90 mtr.
- ix) Energy consumption record- Electricity unit – III Phase- 550 unit, I Phase- 783 unit.
- x) Quality of power: Number of interruptions: 132 , No power: 31.34 hrs. Normal voltage: 87.64 % , High voltage : 0% , Low voltage : 8.12 % , No supply : 4.24 % , No data : 0 %
- xi) Biogas consumption – Dung used- 00 kg, Gas produced- NIL m³
- xii) Two-wheeler usage: Running – 226 Km Km .Petrol – 6.25 lit Fuel efficiency – 36 Km /lit
- xiii) Online visitors : www.dstattara.org –1020 (New visitor –890 Repeated- 130), www.vigyanashram.com – 1414 (New visitor – 1138 Repeated-276) ,www.vigyanashram.wordpress.com – 1135 (Visitor-732 Viewers-403)

Data Report : For Regular update: www.facebook.com/vigyan.ashram.pabal
<https://drive.google.com/open?id=1rCTEiOWZGdfQF-iXTHIWKZIGHZSp15BM>

Our sites : www.learningwhiledoing.in , www.dstattara.in , www.vigyanashram.wordpress.com , www.vadic.wordpress.com , <https://ruralstartup.wordpress.com/>

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Photo Gallery :



Mahindra college – DIY workshop

Azolla in Dome structure



DBRT students fabricated arches for polyhouse



Trials of dome dryer



DBRT project : Bench using ferrocement



Tech fest @ Engineering college @ Shahapur



Solar Panels installed on the roof top of Classroom.