

# Vigyan Ashram Status Report

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### A] Dryers for Self help group

We have fabricated at Vigyan Ashram, three solar flat dryer and one dome dryer. They were made against the order from 'Durgadevi Mahila Swayamsahayat bachatgat [Self help group]' in Shelu (Tal Khed). The dryers will be used by SHG group to run enterprise for drying of leafy vegetables, fragment herbs, fruits etc. Purnesh & Mahesh fabricated these dryers under guidance of Prasad. Now we have developed expertise in designing dryers as per user requirement and fabricating them in our workshop.

VA Team also conducted one day training of SHG members on 10<sup>th</sup> May. Mrs.Nanda Chorge and 9 other SHG members attended the training. We will be providing them EDP support for product development & marketing.



### B] Suhas visited Bhutan for conducting Fab-Academy training:

Suhas visited Fab-Lab Thimpu (Bhutan) from 4<sup>th</sup> May to 2<sup>nd</sup> June. He is a Fab Academy instructor for fab lab in Bhutan. He is guiding 12 students from Bhutan for Fab academy. Earlier he had visited for in December 21 for one month to conduct pre-academy sessions. Suhas also visited farm of our alumni Mr.Ugyen Tshering (Fab-Academy 2017 batch) to know more on his farming activities & Apple cider manufacturing unit.

We are happy to be able to help Fab labs in Bhutan to start their Fab Academy journey.



### C] Construction of Classroom for Agriculture section

Present Agri classroom became old and unusable. Construction of 'New classroom' for agriculture dept is started with 'ground-breaking ceremony' on 3<sup>rd</sup> May. Old structure was demolished. We have completed work of foundation layout, excavation & column footing work in this month. Actual brick work will start after the rains. New classroom will be 700 ft<sup>2</sup> RCC construction. It will have rain-water harvesting system (approx.50000 lit). The work is supported by SPA Education foundation.



### D] Technology Based Entrepreneurship Development (TEDP) program:

- Training on 'Advanced practices in fish farming' was conducted on 28<sup>th</sup> & 29<sup>th</sup> May 2022 in collaboration with Anubhav Pratishthan (Karjat). Training was attended by 8 tribal farmers from Karjat (Raigad district) to learn technical aspects in fresh water fish farming as selection of breeds, feed management, pond preparation, harvesting, economics etc. A progressive fish farmer & consultant Mr.Hrushikesh Akhegaonkar (Jack Sparrow Fisheries, Narayangaon) & Mr.Ranjeet Shanbhag were resource persons.
- A webinar on 'Opportunities in fresh mango trading' was conducted on 1<sup>st</sup> May to promote farmers-to-customer marketing linkage. Webinar was attended by 25 participants including farmers, fruit traders, budding entrepreneurs etc to learn various aspects of trading as maturity index, handling, storage, profit margins, export potential. Mango traders Mr. Swapnil Zagade (Ajwilkar brothers) and Mr.Nitin Tambe were resource person.
- A webinar on 'Opportunities in poultry egg incubation business' was conducted on 15<sup>th</sup> May. It was attended by 23 farmers to learn various aspects of business-like selection of incubator, its working principle, economics etc. VA alumni Mr.Anil Gade (Future Innovative System) guided participants as a resource person.
- EDP Dept provided enterprise registration support (Shop-Act-1, FSSAI-1, Udyam Adhar-2) and on-field visit support to budding entrepreneurs.

#### Heroes of Month:

- **Mrs. Sushma Dahibhate:** Mrs. Sushma started a business of 'Cloth Bag's Manufacturing' in the name of 'Swami Samarth Bag House' at Chale (Mulshi) Dist.-Pune. EDP dept is providing her Mentoring, Licensing, Market Linkages and related support from the EDP program.



**Mrs.Sushma Dahibhate**

## E] Design Innovation Centre (DIC) update:

- Grey water Recycling project (InSic) : Rautaray & Prasad completed foundation layout, stone pitching and sludge tank installation work for solar powered grey water treatment unit @ Dingrajwadi (Shirur). They have also conducted trials of Variable Frequency Drive (VFD) based sludge pump & air blower system. We are expecting commissioning of system by the end of June.
- Agri residue composting (DST:WOS-B) project : Sonal tested 62 soil samples from farmers of Wadgaonpir village. She took help of agriculture intern to collect samples. Soil sample were tested for recording changes in soil Organic Carbon (OC) after use of agro-waste compost. They also tested 25 soil samples received from farmers of Rajgurunagar block as regular soil testing activity.
- Composting consortia: Following consortia culture were prepared at micro biology lab



Team on route to Soil sample collection

- Agriculture composting consortia culture : 200 lit
- BARC consortia culture : 200 lit
- Prepared ETP plant(ASK) consortia culture : 200 lit
- Black Soldier Fly (BSF) : Mahesh & Rahul started trials on Black Soldier Fly (BSF) cultivation using Azolla bio-waste feeding. Aim of trial is to get protein rich (easily digestible) animal feed in the form of BSF. It's found that a blend of 75 % (kitchen waste) + 25 % (fresh Azolla) produces 3.046 kg BSF larvae with FCR of 3.03 in 16 days period. Rahul is planning to use fermented azolla-based feeding for increasing blending percentage of fresh azolla.
- Suvarna & Rutuja conducted 1 day workshop on 'Basics of sensor application' for 2<sup>nd</sup> year Bsc (Physics) students @ Shri Shiv Chhatrapati College (Junnar). 18 students attended the workshop.



Students of Electronic workshop @ Junnar

- Fab-Academy updates: Fab-academy-2022 students are busy in fabrication & testing of final projects. They also completed Shop bot (wood-router) assignment at COEP fab lab. More information on <https://fabacademy.org/2022/labs/vigyanashram/>

### F] DBRT student learning updates:

DBRT students are doing their one month 'Summer internship' at various enterprises. Students are placed in the following enterprises: Fabrication (26 students), electrical (13), solar PV installation (4), plumbing (2), Farming & food processing (1 each), retail (5). DBRT instructors are visiting students at their places of internship for mentoring. Following are few examples of work done during internship-

- Pratik is doing internship @ Prasad Enterprise, Kashti (Tal- Daund, Pune). He had fabricated chaff-cutters along with other workers. Pratik is also getting stipend of Rs.5000/- for his internship.

- Samarth & Malhar learning field installation of solar PV panels for solar pumps, roof top power generation systems @ Gram Oorja Solutions Pvt Ltd. They are visiting field sites and learning new things.

- Ganesh has joined Amrut bakery (Baramati) to learn manufacturing & retailing of bakery products. Ganesh also earned Rs.3000/- as internship stipend for his services at bakery.



**DBRT students @ workplace**

- Ramu & Akshay are working with Mr.Sachin Jadhav (Pabal village) to learn plumbing skills. They have done work like fitting of toilet pots, wash basins, concealed plumbing lining etc. They earned Rs.3000/- as stipend for their work.
- Ashish & Sameer are working with Kanade fabrication (Kendur Pune) to learn 'pick-up vans hood' fabrication skill. They helped in fabrication of 35 hoods during last 1 month earned Rs.3000/- as internship stipend.
- Ajay, Keshav & Soham are working with 'Ashish Electronics' (Rajgurunagar) for learning repair & sales of 'Home appliances'.
- Lakshmi & Pramod completed painting & plumbing work of new recreation centre of boys hostel at Pabal campus. They earned Rs.3438.00 as labour charges on total material cost of Rs.11183.00.
- Soham & Om are recording weight gain for goat kids with different proportions of milk + starter feed (milk replacer) at Vigyan ashram. We have added new goat buck of Boer breed in farm for cross-breeding at Vigyan Ashram.

## G] IBT Maharashtra & Uttar-Pradesh updates:

### IBT Maharashtra updates:

Schools in Maharashtra are on summer holidays. But IBT team @ VA is busy planning for next academic year.

- IBT team conducted Training Need Analysis (TNA) of instructors for designing training program, IBT tools upgradation & activities planning for new educational year.
- IBT school Head-Masters (HM) meeting was held for submitting proposal to LTI. Principals of 21 schools attended the online meeting. Objective of meeting was to orient schools about CSR policies, IBT implementation strategy, funding needs, challenges etc.



Meeting with Mahle CSR Team



Visit of Scheffler CSR to potential IBT school

- We are also discussing with 10 schools from Maval block of Pune district to start IBT program from next academic year. IBT Team visited all the school to survey existing infrastructure facility & due-diligence. We are submitting proposal to Schaeffler India Pvt Ltd for funding under their CSR initiative. Scheffler team also visited three schools on 27<sup>th</sup> May.
- Field survey was conducted for 4 IBT schools in Ambegaon & Junnar block of Pune district on 25<sup>th</sup> May for upgradation of IBT infrastructure facility. These schools are supported by Mahle Engineering Service Pvt Ltd for effective implementation of IBT program.
- An introductory session on 'learning-while-doing' methodology was conducted for 8th & 9th class students at 'Nachiket Balgram School (Akurdi, Pune) on 20<sup>th</sup> May. Students learnt application of testing of water potability by using H2S test. Mr. Milind Godbole (President), Mr. Prashant Chopade & other dignities from Mahle Engineering Service PVT Ltd- CSR initiative attended the program & interacted with students.

### IBT Uttar-Pradesh updates:

IBT program has started in 43 schools of 15 districts in Uttar-Pradesh. We have started basic activities like preparing vegetable nursery, brick work , making food products – chikki , laddo etc.

Sharad attended review meeting at Unicef office on 9<sup>th</sup> May. Unicef officials visited Madiyav schools in Aurangabad district on 10<sup>th</sup> May.



Seed treatment @ Madiyav school,UP

Now schools are closed from 20<sup>th</sup> May for summer vacation. IBT Team is busy in content preparation in Hindi during school vacation.

## HJ] DIY Lab and Atal Tinkering lab (ATL) support :

### Do-it-Yourself Lab :

- Training workshop on 'Laser cutting and engraving' was organized @ 1<sup>st</sup> May for high-school students. Training was attended by 6 students to learn basics of designing, laser cutting, engraving etc while preparing different articles.
- Prathmesh & Indrajit conducted 'digital fabrication' training workshop from 23<sup>rd</sup> May to 27<sup>th</sup> May at Muktangana exploratory (Pune). Training was attended by 8 high-schools students to learn 3D modeling, basics of electronics through virtual circuitry, coding etc while fabricating a robot.
- Rutuja, Priyanka is completing DIY manual for projects conducted with ATLs in Chattisgarh.



**Training @ Muktangana**

### ATL @ Andhra-Pradesh:

Schools are on vacation in Andhra Pradesh. Still, we have decided to conduct 'Design thinking' workshop in five ATL schools in Krishna & Guntur district. Workshop was conducted for 5 days each in SRSM tenali boys high school, ZPHS Gampalagudem school, APSWRS Jaggaiahpet school, ZPHS Kollur school, ZPHS Movva school. During the camp, Students interacted with villagers, farmers etc. to understand their difficulties and define a problem statement for their project. Students were encouraged to use these problem statements to develop their project.



3D designing during ATL camp



Survey for problem identification @ ATL camp

## I] ASTI – Distance learning content development project

- i) Video shoot conducted for 'Paver-block manufacturing' enterprise at Nighoj village (Tal- Shirur) on 26<sup>th</sup> May
- ii) We have received second edited version for Composting video course. It need some more modifications.
- iii) We have started work on new topic – Biofloc fish farming. Mrs.Vaishali Kanaskar will help us in script writing. More about content development on : <https://theskillsguru.in/>
- iv) Marathi Wikipedia update: Priyanka completed proof reading of 75 pages of 'The Twentieth century English-Marathi Dictionary Volume II' ([रानडे इंग्रजी मराठी शब्धकोश खंड दुसरा](#)). Team completed scanning of 5 books (664 pages) of Mr.Suresh V Mahajan.

## J] Other tit-bit:

- i. Yogesh Kulkarni attended meeting of NEP – National focus group on vocational education meeting on 8<sup>th</sup> and 9<sup>th</sup> May at Banglore.
- ii. Promotion of DBRT admissions: We have started admission process for 2022-23 batch. DBRT course will start from 10<sup>th</sup> July. We are promoting this course via e-mail, social media platform and visiting NGOs working in tribal and rural areas. Vishal visited Karjat, Raigad district and gave information about DBRT course to NGOs and students.
- iii. Archana Shinde (B.A, BEd) & Akshay Chaudhary (M.A) joined in team to work as field-officer in IBT School program.
- iv. Weather record – Rainfall of the month -0 mm (Total: 665.98 mm) ,Max temp-39.00° C, Min Temp – 22.00° C , Humidity – 58% , Water height in well– 8.40 M.
- v. Energy consumption record- Electricity unit – III Phase -409 units , I Phase import- 124, Solar generation-1490. DG used – 01.45 Hrs.
- vi. Animal Husbandry section update – Milk production –428 Kg, Poultry –NA, Goat- New buck of Boer breed purchased.
- vii. Biogas produced-8 M<sup>3</sup> (Dung used- 200 Kg), E-rikshwa uses- 179 Km, Water purchased- Rs.12250 (0.7 lakh litre)
- viii. Online visitors: www.dsttara.org – 948 (New visitor-828, Repeated-120), www.vigyanashram.com – 1613 (New visitor-1245 Repeated-368)

**K] Data Report:** [shorturl.at/CKOUV](http://shorturl.at/CKOUV)

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## Photo Gallery:



Making Burfee in Food lab



DBRT students : CCTV repair



DBRT promotion for new admissions



Visit to industry for placement.



Workshop @ Muktangam



Grey water recycling site @ Dingrajwadi



23kg Azolla was harvested for trails



Unicef officials visiting IBT schools in U.P



Empathy : Identifying problem.. talking to customer



Vishal @ Yusuf meher Ali Center : DBRT promotion