

Vigyan Ashram Status Report

Volume 43 Issue 4

April 2026

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A] Celebrating 'International Year of the Women Farmer' with alumni success stories:

Agrowon, a leading agricultural newspaper in Maharashtra, published success stories of women working in agriculture. The article, published on 26th April, on the occasion of 'The International Year of the Woman Farmer', featured four of our alumni: Mrs. Seema Pathare (apiculture), Ms. Sonal Shinde (soil improvement technologies), Mrs. Prajкта Pawar-Thaneekar (agri-export consultancy), and Mrs. Apoorva Sancheti (organic and sustainable farming). During the past decade, Vigyan Ashram has encouraged girls' participation in our training and research.



B] Annual project planning meeting at Pasali (Velhe):

The annual project planning meeting was conducted during 16th to 18th April at Pasli village in Rajgad block (Pune). Total 38 team members from educational, skills training, technology development projects participated in the training. We had discussed organization's Vision & Mission and its alignment with different projects. Mr. Kiran Inamdar (leadership trainer) and Mr. Chaitnya Nadkarny (Trainer & Chairman STARS Forum) guided the discussion & helped in understanding basic concepts of team building & organization leadership. We have also discussed common administrative issues and plan for coming year.





C] New batch of sewing course started

In the month of April, 13 new ladies joined Asmita lab for learning tailoring. Six ladies joined to learn aari work and others joined for basic tailoring course. We have added 3 new sewing machines; one is flatlock machine and other 2 are regular sewing machines. Asmita lab had completed order from Lions club, Pune to stitch 20 bags with their logo.



D] MSBVET examination was conducted

39 students appeared for Maharashtra State Board of Skill, Vocational Education and Training examination during 30th March to 2nd Apr. They have appeared for following examination

Welding - 9 Electrical - 19 Food processing – 8 Solar Technology – 11.

On 30th March, practical examination was conducted in the presence of Mr. Rapatwar from Karegavan ITI. Theory examination was conducted on 1st and 2nd Apr.



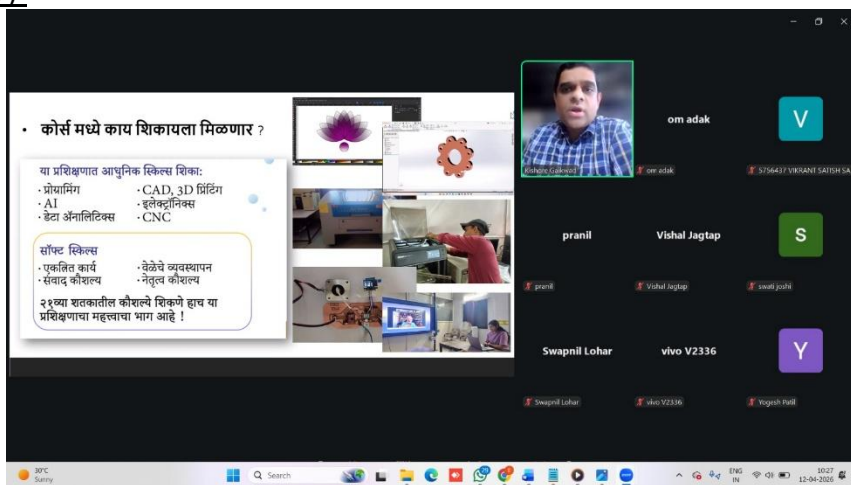
E] Entrepreneurship Development Program (EDP) update (VATF):

Webinar on Fab-Opportunity-Academy (FAO):

The 21st century skills requirements are changing very rapidly with the advancement of Artificial Intelligence (AI) & Robotics. VATF is exploring the possibility of designing rapid-learning-course on 'Advanced Fabrication skills' for educated youth in collaboration with Fab-foundation

(<https://fabfoundation.org/education/>).

The course will be targeted for unemployed youth. It will be an 8-week hands-on learning program designed in consultation with industry partners. To communicate course design, a webinar was conducted on 12th April. It was attended by 42 participants to know course structure, methodology, internship & job opportunities etc. The first batch of courses is scheduled to start from 15th July 2026.



Review meet of Vaan-Dhan Kendra: On 25th April, a review meeting of VanDhan Vikas Kendras (VDVK) formed by Tribal Co-Operative Marketing Development Federation, Ministry of Tribal Affairs was conducted at Pabal campus. 4 VDVK members from the Junnar region participated in the meeting with Mr. Amol Waghmare (Social activist) and Dr. Yogesh Kulkarni. An annual production, marketing plan and support required from Vigyan Ashram was discussed during the meeting.

Field visits & incubation support:

Following field visits were conducted by EDP team for providing technical guidance & incubation support in April:

- Ganesh & Ranajeet visited an advanced poultry nutritional laboratory (VH group of companies, Loni Kalbhor, Pune) on 1st April, to discuss partnership in skills training & research activities. On the same day, they visited Alratech project Pvt Ltd to explore new food processing equipment in chips manufacturing & packaging industries for business expansion of Mr. Mayur Chaudhari (EDP alumni).
- A new enterprise registration & licensing support provided to 2 budding entrepreneurs (1- Udyan & 1- FSSAI license)



Hero of the month:

Mr. Vishal Mashere started a commercial poultry farming unit (Mashere Poultry Farm, at- Kanhesar, Tal- Khed, Pune). Vishal was backyard poultry farmer & after getting technical training he has ventured into fulltime poultry farming with 4350 ft² poultry shed & 3500 desi birds.

F] Diploma in Basic Rural Technology (DBRT) course updates:

Promotion of admissions for the new DBRT batch (2026-27) was started with field visits and workshops in remote regions of Maharashtra state. During April month, we conducted a 5-days visit in the tribal belt of Nandurbar districts. A 'Parichay-Shibir' (course introduction camp) was conducted during 27th to 30th April at Pabal campus. The camp was attended by 6 students from Parbhani, Nasik and Jalana districts. Students were introduced with course methodology through hands-on activities.



Section specific learning activities of students are given below-

Home & Health section: In H & H section, students completed an order of 16.40 kg of Moringa Chikki. Students finalise a recipe of protein pre-mix soup powder (2 kg), beet-root squash (1.5 lit) along with the production of tomato sauce (6 kg), Tamarind sauce (6 kg) and wheat-milk powder (3 kg). Apart from this student processed 28 kg bread flour while earning a community service of Rs. 2,800/-.

Agriculture & Animal-husbandry section: In the farming section, students established a plant nursery on 940 sqft area. It has a working space (pagoda of 256 sqft), a shade-net house (264 sqft ft) for vegetable seedlings and space for horticulture & ornamental plants. Students worked in a team to fabricate nursery structure, fix shade-net & prepare drumstick (1000 plants) and ornamental plant seedlings. Apart from this, they filled 2 vermicompost beds (1 ton each) and worked in a goat & dairy farm for regular feeding & milking of animals.

Energy & Environment section: The students in this section completed electrification of a new ladies-toilet block with 12 lighting points & earthing pit. Total cost of the work was Rs.10,050/- including labour charges of Rs. 1,260/-. Apart from this, students also learnt repair of air-cooler and re-winded motor of bench-drill machine for workshop section. Total value of community service for the April month was Rs. 20,770/-.

Engineering section: In the engineering section, a group of new students fabricated a guard for solar water heater vacuum tubes as a fabrication project. They also learnt the basics of masonry work while constructing a brick-wall & water chamber. They worked on fabrication of the dining table for the kitchen, and chapati making machines. Total value of their community service was Rs. 43,410/- including students earning of Rs. 8,654/-. Individual students' learnings can be found on their blogs:

<https://alumni.vigyanashram.blog/category/batches/2025-26/>



F] Technology development & Design Innovation Centre (DIC) updates:

Black-Soldier-Fly (BSF) & Backyard poultry farming:

- BSF based poultry feed trial was conducted at Tejas Poultry Farm (Kalambat, Dapoli) during 4th to 8th April. Though the trial period was very short (due to lack of dried BSF larvae) the results were encouraging. During trial, BSF feed showed good acceptance & FCR of 3.10 as compared to 4.35 for regular pellet feed. Based on these results, the feed will be prepared for full-scale field trials.
- Mahesh conducted a grain feeding trial on BSF larvae. He found that spent grains feeding significantly enhance larval growth, but its sourcing is difficult. Mahesh processed 35.8-ton wet waste at Rajgurunagar to produce 424 kg pupa and 1.004 kg BSF eggs.
- Santosh & Indrasing fabricated an automated shutter (96 ft² area) for the BSF breeding chamber. The shutter will protect the open-air projection of the BSF breeding chamber from excessive sun-heat & rain. It has a light intensity sensor automated operation.
- Mahesh visited Surat (Gujrat) on 4th & 5th April to help local entrepreneur (Ms. Vani Chandra) in setting up a BSF based waste processing unit.

Vibro-Thermal-Disinfector for store grain: Abhijit & Yashwant conducted the first trial run of the first version of VTD working prototype. It has SS food grade vibrating trays, thermostat-based heaters (500 watt) and hoppers. The trial showed VTD achieved 60°C temperature in 7 min. But the grains are not getting enough holding time (desire 7 to 10 min Vs 2-3 min actual holding) for disinfection of grains. Team is working on controlling flow of grains from hoppers and trays for improving holding time.

Forced air onion storage: Harshad & Shreyas has started the first trial run (30 days) of 1 MT ton capacity forced-air smart onion storage unit. The live trial started with 2-ton onion loading (2 units as experimental & control) with automated sensors (temperature, humidity, CO₂ and H₂S indicator) for data collection. The control unit doesn't have forced air circulation. The initial data showed the experimental unit (with forced air circulation) has higher H₂S at bottom level (as spoilage indicator).



Onion storage trials

Other highlights of technology development work:

- Harshad & Abhijit conducted trials on temperature rise in polyhouse climate control systems. They found exhaust fans were not working efficiently due to short-circuit in airflow. They found that at 70000 lux (outside temperature 39°C) the polyhouse's inside temperature was raised from 32 to 41 °C. At 41 °C, the polyhouse reached equilibrium stopping further temperature rise. The cooling fan & foggers doesn't help in temperature reduction due to lower air-exchange & short-circuits.
- Ayushya made 8 different (CAD) designs for automated bamboo-hanger fabrication. After discussion with Mr. Ajit Takke (bamboo entrepreneur) and he finalized 2 designs for prototype fabrication. The new design will produce curved ends for hanger-strips.
- Hritik completed CAD design for 'Shadu-Mati Ganapati Mould'. He is consulting Mr. Jagdish (entrepreneur) for mould fabrication & trial run.
- Tushar Kukreja (alumni & promoter of 'Navrang Tea') worked on the development of a Standardized Tea brewing machine. The unit aimed at improving consistency, hygiene, and aroma retention in making tea. He conducted several experiments in an analytical chemistry lab during 3rd to 7th April. A critical brewing parameter such as temperature, stirring, time, and pressure etc were tested for increasing aroma & taste of tea. The best results for aroma were found in a condensation-based method.
- A research paper titled "Effect of different EC ranges on spinach (*Spinacia oleracea*) growth in NFT hydroponic system" authored by Sayali K Choudhari, Arun Dixit and Ranjeet Shanbhag were published in the International Journal of Horticulture and Food Science (2026, 8(4), 07–09). Link of the paper - <https://drive.google.com/file/d/1wOCUHEP6N8w4XH3sl-iFUDGDB8BkCMp9/view?usp=sharing>
- Ms.Amisha Kashyap completed her 12-month research-fellowship. She worked on Plant Tissue Culture (PTC) and successfully developed a propagation protocol for *Aglaonema* (*Aglaonema commutatum*). She also worked on Moringa, Napier Grass, and Suran (elephant foot yam) as per project work.
- Dharmesh Makvana (Mechanical Engineering) joined a 6-month research-fellowship program at DIC. He will primarily work on Vibro Thermal Disinfection (VTD) and polyhouse thermodynamic study.

G] School based vocational program updates:

Introduction to Basic Technology:

A two-week instructor capacity strengthening training program for instructors from CSR box from Gujarat was conducted from 19th Apr to 2nd May at Pabal. Total 6 instructors participated in the training.

CSR officials from Mahle Engineering Mr. Kamlesh Kulkarni and Mr. Pritam Ghadge visited Sumati Balvan school, Katraj on 10th April to review IBT program. They visited all the four departments and interacted with students and expressed satisfaction over the progress.

SEED the Future competition: On 19th Apr, LA Fondation, Dassault systems announced 30 teams for semifinals. Two schools mentored by Vigyan Ashram got selected for semi-finals.

After rigorous semifinal rounds with online pitches and presentations, both the schools got selected for the **Top 10 Grand Finale**. The final stage will be held in person in the month of June.

Learning By Doing (LBD) (Uttar-Pradesh):

Following training of teachers were completed this month at Lucknow.

- 6th to 8th April 2026 (District – Gautam Budh Nagar, Lucknow, Mathura) – 103 teachers
- 9th to 11th April 2026 (District – Chitrakoot, Ghaziabad, Hameerpur, Lalitpur) –Total: 103 teachers.
- Prashant attended five days workshop on 'Digital Pedagogy' organised by UNICEF in Lucknow from 27th Apr to 1st May 2026.

A project for Training for teachers from Govt schools in UP got completed in this month.

STEM education (Jharkhand): Project of implementing STEM program will be concluded soon. Team has finalised STEM manual in Hindi and its under printing. Team conducted online webinar on Maths activities in 18 schools. More than 750 students participated in the activity. Tina and Jay visited schools to demonstrate STEM lessons in classroom.





HJ FAB lab & DIY lab update:

Fab Lab and academy:

Fab academy, students worked on four assignments in the month of April. Electronic PCB making for different electronic assignments was focus for this month. Kishore and team designed and fabricated own PCB to combine all 4 assignments including electronic production, input, output device and networking & communication.

DIY Lab:

DIY lab team started summer workshops for girls from Niramay Bharat organization. These are students from grade 6-9 from different vasahats in Pune.



- A workshop was conducted at Janata vasahat, Parvati from 31st March to 4th April. Total 30 students benefited from this workshop.

I] Other titbits:

- A film on ATL project in Andhra Pradesh , Karnataka and Telangana is available now on youtube : <https://www.youtube.com/watch?v=1BGYBzcEG2w> It can be viewed from www.vigyanashram.com
- A third party study on ATL project in AP, Karanataka and Telngana is published on <https://vigyanashram.com/wp-content/uploads/2026/05/Case-Study-of-Maker-Spaces.pdf>
- Dr Yogesh Kulkarni delivered session on 'Koushal Bodh' Skills training program from Grade 6-8th on 23rd April at PSSCIVE,Bhopal. The session was in the National Capacity Building Programme for for Key Functionaries and Teachers on Effective Implementation of Skill Education Initiatives in Schools. Dr.Yogesh gave a talk on Vocational Education in Grade 11 and 12th as per NCF-SE 2023 at Manthan convention held at Fergusson college on 17th April.
- Dr.Yogesh participated as a panelist in a webinar on RuTaG Smart Village initiative by Principal Scientific Advisor to Govt of India on 8th April. He talked about RSVC at Village Dhamari in collaboration with Agro Rangers.
- Dr.Yogesh attended 4th Text book development workshop for Grade 11-12th on Vocational Education at PSSCIVE,Bhopal.
- On 20th April, Ranajeet & Yogesh attended the foundation day ceremony of Taxol Engineering Pvt Ltd (Pirangut, Pune). They presented work done by VA through Texol CSR funding at Pabal campus.

- vii. Prasad Patil resigned from his post of 'DIC project manager' for better prospects in industry. Prasad worked in Vigyan Ashram for 5 years on development of gasfire, solar dome dryer, UV surface sanitiser technologies. We wish him best-luck for future endeavours.
- viii. A new water distribution pipeline was laid in Pabal campus for dividing drinking & irrigation water supply. The total length of the pipe-line was 540 meter with investment of Rs. Rs. 14,250/-.
- ix. Weather record – Rainfall of the month – 19.90 mm (Total: 813.77 mm), Max temp-42.00°C, Min Temp –18.00°C, Humidity –42 %, Water height in well– 2.70 m, Waste-water COD – Girls hostel – 140 ppm, Boys hostel – 276 ppm (acceptable level)
- x. Energy consumption record- Electricity unit (import) – III Phase- 1578 units, I Phase- 210 units, solar generation III Phase – 2156 units & I Phase- 737 units, Solar generation (off-grid)-126 units, DG used – 1.40 Hrs, Biogas- 37 m3 (740 kg dung used).
- xi. Animal Husbandry section update – Milk production –412 Kg (loss of Rs: 2614.00).
- xii. Online visitors: www.vigyanashram.com –2778 (Organic-1386, Other-1392), Pabal campus visitors: 289.

JJ Data Report: <https://shorturl.at/b87ke>

(Work at Vigyan Ashram is supported by: EATON Foundation, LTI-Mindtree, SPA Education Foundation, Dept. of Science & Technology, La-Foundation, UNICEF, TATA Technologies Pvt. Ltd, MAHLE Engineering Services Pvt. Ltd, Schaeffler India, Texol Engineering Pvt Ltd, K R Shroff Foundation, INDUSA Endowment, Savitribai Phule Pune University, Asha for Education, Praj Foundation, The Prabhu Trust, STARS Forum and many individuals and foundations).

Photo Gallery:



Interacting with students at Padmamani school



Automated shutter for the BSF feeding chamber

विषय:
यह सोलर हाइड्रो डिस्टिलेशन यूनिट मुख्य रूप से गृहमस्जिद बनाने के लिए डिज़ाइन की गई है, लेकिन इसे अदक, नीम, तुलसी, पुदीना, शिकोकाई, रीठा, चमेली आदि जैसे प्राकृतिक सामग्री से अत्यधिक तेज़ और हल्क़े कंसेंट्रेटर (अर्क) निकालने के लिए भी इस्तेमाल किया जा सकता है।

साम:

- ग्रामीण समुदायों के लिए स्थानीय आजीविका का व्यवसाय
- कम रखरखाव वाला सिस्टम
- लगातार निगरानी की आवश्यकता नहीं
- जोड़ना या हटाना जैसे पारंपरिक हेलन के बिना संभालन

विशेषताएँ:

- 7 लीटर घासी इन्क्यूबेशन बॉक्स
- तापमान सीमा: 5-21°C
- आकार: 85-90% बनाए रखी जाती है
- आयाम: 114.3L x 101.5W x 80.3Hcm सेमी
- 100 किलो क्षमता वाला स्टोरेज बॉक्स
- 12 लीटर घासी स्टोरेज, 4 केटल, 1 फ़नल

सोलर हाइड्रो डिस्टिलर
 By: IIT Bombay
 Cost:
 Suitable For:
 - छोटे उद्योग
 - चरद सफ़ाया समूह (SHGs)
 - महिला संप्रदाय

Webinar by IIT Bombay under TAP Rise



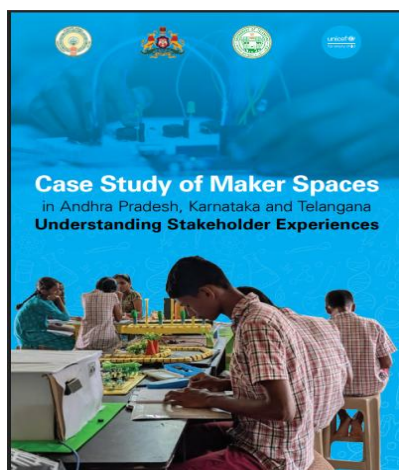
UP CM Visit at Composite School Shivpur, Varanasi – LBD program on 4th April



KGBV students working on STEM Math activity at Murshidabad



Niramay Bharat organization workshop at Bibwewadi, Pune



A third-party study on ATL project is published



BSF Oil extraction

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