# Vígyan Ashram Status Report

### Volume 39 Issue 11

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# A] Azadi Ka Amrut Mahotsav - DBRT alumni featured in TECH<sub>ली त</sub>@75

DBRT alumni entrepreneur Mr. Aniket Kanade was invited for interaction with Hon Minister of Science and Technology Dr. Jitendra Prasad on the occasion of inauguration of "TECH- नीव@75".

It is a series of programs organized by Dept of Science and Technology on the occasion of 75 years of Independence (Azadi Ka Amrut Mahotsav) to highlight impact of Science and





फेंदुर (सा. शिक्षत) : ऑनलाइन कार्यक्रमात सहभागी झालेला अनिकेत (डावीकडील) व जोजारी त्याचे वडील सोपान कानडे.

संस्थेत २५ वर्षांपासून 'ग्रामोण तंत्रज्ञान पदचिका' अभ्यासक्रम सुरू असून आतापपैत साहेतीन तजार उद्योजन तवार झाले आहेत. या पार्श्वभूमिवर बेड सरकारच्या वतीने देशालील सात नयउद्योजकांचा कौतकनरोहळा

नार्यक्रमाचा समन्त्रण केरस. या आयोजित केला तोता. ऑनलाइन कार्यक्रमात विज्ञान आणि तंत्रज्ञन यंग्रालय, जेव-संप्रज्ञान विभाग, वैज्ञानिक आणि औद्योगिक संशोधन परिषद आणि पृथ्वी निज्ञान मंत्रालय आदी मंत्रालयाचे लिभाग सहभागी झाले होते.

अनिकेल कानते याने २०१७ मध्ये लिजान आजममध्ये प्रामोण র্গেশ্বান দার্বেকা রা ত্রুবাঁইক जभ्यासक्रम पूर्ण करून चौफु केटर सल्याका कामते तेलि वर्क' ता होती अवजारे आणि मा वाहतूक गाल्लाचे हड बनवण्य विवायम संस करने व्यापयी केला आहे. मरापंत्र, पेरणी-यंत्र, फत्त्रे असी नावीन्यपूर्ण आणि बम्ही म्हर्पातील पोली अवजारे त्याने बनवन प्राणिण भागात प्रचलित केली आहेत. त्याच्या या कामाली त्रवल केंद्र साकारने घेलली आणि त्याचा देशचातळीवरील कार्यक्रमात सन्मान केला. विज्ञान आश्रमचे संचालक हों, योगेश कुलकर्णी, रणजित शानवाग पांच्यासह अनिकेलचे पहील सोपान व आई सुरेखा कानडे यांनीही कार्यक्रमात सतमाग चेलाग

Technology in creating social equity and inclusion.

Mr.Aniket (DBRT Batch 2018) started his 'Agri-tool fabrication' enterprise at Kendur village. He was selected under social change maker category for successfully adopting technology ffor community benefit and self-employment. He joined inauguration session organized in virtual mode and shared his entrepreneurship journey.

His success story is available on DST website - https://dst.gov.in/farmers-own-fabricatorcustomizing...

# B] Visit of Education Dept officials from Andhra, Telengana and Karnataka

A Team of 14 Education Officers from SCERT, Samagra shiksha and UNICEF visited Vigyan Ashram from  $11^{th} - 13^{th}$  Nov. Visit was organized as a part of orientation to 'Atal Tinkering Labs'. This visit was part of initiative to strengthen ATL labs with the support of Unicef. Team was headed by Mr.Sheshgiri Madhusudan (Education consultant,UNICEF,Hydrabad).

On 11<sup>th</sup> Nov, team underwent hands on workshop at Vigyan Ashram. They got introduction to machines in ATL and their potential applications.

On 12<sup>th</sup>, visit was organised to ATL at Jnana Prabodhini, Millenium School, Kalmadi High school. like ATL Topics curriculum, layout of lab, inventory management, ATL operations were discussed during visit to ATLs in Pune.



On 13<sup>th</sup> Nov, team visited Muktangan exploratory and visit was concluded at D-I-Y lab at J.P Naik Center.

Vigyan Ashram is supporting ATLs in Andhra Pradesh and target is to create 20 model ATL labs in Andhra. This visit was useful in orientation of Govt officials and getting their involvement in strengthening ATL labs.

## C] Training of DBRT students from 'Narmadalaya' Madhya-Pradesh:

During lockdown, 12 students from Naramadalaya (Nimar Abhyudaya Rural Management & Development Association, MP) joined DBRT course (batch 2020-21) through work-bench (online-offline bended) training model. They had completed their practical's at Naramadalaya. To ensure quality of training, we have invited 12 DBRT students & 2 instructors for finishing training at Vigyan Ashram during 10<sup>th</sup> to 17<sup>th</sup> November. Selection of activities were done in consultation with students. They learned advanced skills in fabrication, farming, electrical & food processing section. During their stay they learnt skills like MIG welding, spray painting, Solar PV installation, hemoglobin testing, engineering drawing with CAD etc.

# D] Entrepreneurship Development Program

# i) Training on 'solar business opportunities':

EDP on 'solar PV based business opportunities' was conducted in both online & offline mode. Online training was conducted from 13<sup>th</sup> to 17<sup>th</sup> November. After online training, hands-on offline training was conducted on 20<sup>th</sup> & 21<sup>st</sup> November at Pabal. Following are highlights of training -



**Online training :** Training was attended by 182 participants from around 10 + colleges & training institutes. It comprises of 10 online sessions covering basic aspects of PV panel installation, load calculations, invertor & batteries selection, business opportunities in innovative applications etc. Industry expert Mr.Dipak Babar (Constro Energy Solution), Nilesh Girase (SELCO India foundation) and VA team were resource person.

Offline training @ Pabal Training campus: was attended by 17 participants including college youth, rural entrepreneur and ITI teachers Training covered various practical aspects of solar PV applications like energy load calculations, PV panel & selection installation, invertors & batteries etc. Industry experts Mr.Sanket Valse (Gramoorja Pvt Ltd),



EDP @ Sanjeevani College of Engineering

Mr.Pratik Gahvane (Ecozen solutions) (Both are VA-DIC alumni) guided participants on various

technical aspects. VA team of Prathmesh, Rahul, Hrushabh conducted sessions on designing of PV systems.

# ii) EDP at Sanjeevani College of Engineering, Kopargaon

Dr.Yogesh and Mr.Kiran Inamdar conducted EDP for second engineering students of Sanjeevani college of engineering from  $22^{nd} - 24^{th}$  Nov at Kopargaon. Total 65 students participated in the

training. Training covers topics like goal setting, selecting business idea, preparing business plan, marketing etc.

## iii) Entrepreneurship support

- a) Sachin visited Mr. Sagar Nalawade's Geranium Oil Extraction plant at Hiware (Tal- Junnar, Dist- Pune) on 26th November to provide handholding and technical support.
- b) Yogesh provided support to budding enterprises in Udyog Aadhar Certificate (1), FSSAI Licence (1), Shop Act (1) licensing.



Oil extraction plant

## Hero's of the month:

a) Mrs. Sapna Bavner & Team: Sapna & Team has started 'Honey and Honey Product'

business in the name of **'Arogyamrut'** at Balaji Nagar Yavatmal. This group is receiving a business development, production process setting and related support from the EDP department.

<u>Mrs. Pramodini Diwakar:</u>
Pramodini has started her
confectionery business in the name
of 'Diwakar's Confectionery" at
Shikrapur Pune. She is receiving



Digital Marketing ,Business Development support through EDP program.

# c) Mr.Rajesh Kasar: Rajesh started his 'Matoshri electrical & motor rewinding' enterprise

shop at his native place Shingveparagon (Tal- Ambegaon, Dist-Pune). Rajesh is DBRT (batch 2018) students and getting necessary hand-holding support under EDP department.

# E] Design Innovation Centre (DIC) update:

 New version of 'Akshay Home Composter': A new version of household level kitchen waste composting is launched with Fibre Reinforced Plastic (FRP) & powder



Inauguration of Rewinding workshop of Rajesh KAsar

coated steel structure. New design can be folded & assembled on-site for easy & costeffective transportation. We are trying to reach potential users through social media

platforms to take primary feedback & potentials of commercial production through NKS Pvt Ltd.

 Pre Fab Academy @ Bhutan Suhas went to Bhutan on 8<sup>th</sup> Nov to conduct Pre-Fab Academy training. (<u>https://www.fablab.bt/</u>). He is conducting pre-fab academy training for one month. Fablab Bhutan will be conducting Fab-academy training for the first time in 2022. Vigyan



Suhas @ Fab Lab Bhutan

ashram will be providing necessary technical & training support.

 Sonal & team from Srinivas Service Trust (SST) prepared a compost bed of 15 ton agricultural waste @ Vadagaon-peer village. We are motivating farmers to join agrowaste composting trial on every field in this village as a 'Machise

माचिस (matchbox) free farming'.

Kedar, Sapana and Sonal started trials on tissue culturing of Tobacco (Nicotina Tabacum), Frerea indica (Shiv suman), Gokarna (*Clitoria ternatea*) and Madhumalati (Combretum indium) learning as trials. Dr.Vinayak Lokhande is providing necessary training to team.



Composting of Agro waste @ Vadgaaon peer

- Ashish successfully tested his 'IOT based smart shegadi' with Wad-pav vendor in Pabal village. He found overall acceptability of product is positive for end user with some minor suggestions on temperature controls, stove hight etc. He is making necessary changes & get user feedback.
- Fab-school project @ Mukhai school is gearing up with re-starting of student activities. In November, 5kW solar electrification work was completed by 'Gramoorja'. DBRT students were engaged in installation. On 19<sup>th</sup> November Living Lab (IIT, CTARA) student team visited School to review progress and decide further scope of work.
- Fab School Project is highlighted on La-foundation (Dassault Systems) official web-page - <u>https://blogs.3ds.com/.../how-la-fondation-dassault.../</u>

# F] DBRT activity updates:

DBRT students were on Diwali holiday from  $1^{st}$  Nov –  $15^{th}$  Nov. Six students stayed on campus for maintaining essential services viz Animal husbandry, water and electricity. After Diwali vacation DBRT students rejoined campus. Following are some of their campus activities highlights as -

- Energy & Environment section: Students who stayed on campus during Diwali carried out installation of ceiling fans in hostel dormitory and fitting new electric connections.
- Students learnt basic skills of dumpy level surveying and functioning of smokeless chulha in their environment class.

- Home & Health section: Students prepared 5 kg 'Dried pooran mix' and sold in Pabal village on the occasion of Diwali
- Workshop section: Students fabricated table for invertor & battery set, a stool, door frame.
- Agriculture section: Regular agricultural and animal husbandry activities are in progress including planting radish in polyhouse, making silage & dry fodder treatment for dairy-goat farm etc.
- In Goat farm, 4 new kids are born. We lost one goat due to complications in pregnancy.



Students activities & learning updates can be found on -<u>http://alumni.vigyanashram.blog/dbrt-batch-2021-22/</u>

## G] IBT updates:

IBT Maharashtra:

festival.

- IBT Students of Kendur (Pune) schools fabricated a 'bicycle stand' in the school premises. This will solve problem of random parking of bicycles. IBT 9<sup>th</sup> class students fabricated stand for 30 bicycle capacity. They used scraped material and overall cost is Rs.2500/-.
- In Malegaon School, IBT students had installed a 5-tube light in the school.
- In Marunji School students prepared blackboard dusters for school as a part of their carpentry skills learning activity.



Bicycle Stand @ IBT KendurIBT

• Mr.Sachin and Mahendra met Mr.Amol Kolhe (**Hon.MP- Shirur**) on 19<sup>th</sup> Nov 2021 at Narayngaon. They introduced them about IBT program and requested their financial support for 4 schools from Junnar and Ambegaon.

# Uttar Pradesh:

• IBT schools 'coordinator' training program was organised for 3 districts- Chandauli, Lucknow and Kanpur. The aim of the training is to introduce IBT program and explain role of the school coordinator. • IBT program review meeting was conducted online on 30<sup>th</sup> November. Officers and team

- of Education and Labour department were present for the meeting. Status and issues were discussed and next action plan was decided.
- Process for appointment of instructors in all school is in progress.

# H] DIY lab & ATL lab training updates: DIY Pune updates:

Following workshops were conducted at DIY on every Saturday : i) Papertronics ii) Use of IR sensors iii) Making walking robots.

DIY team is also helping IBT schools for preparing projects for Techno-vision Exhibition.

## ATL Chhattisgarh:

 Priyanka conducted ATL lab instructor training program on 29<sup>th</sup> & 30<sup>th</sup> November @ Government Higher Secondary School Kaundkera (Fingeshwar block, Dist. Gariyaband). Ten ATL teachers were participated in the training to learn basics of 'design thinking', application of Arduino and mobile app development.



Workshop @ D-I-Y Lab



Following 3 online sessions were conducted in November -

Date	Name of session	YouTube link
12 <sup>th</sup> Nov	रोबोटिक्स की मूलतत्व भाग १ <sup>:</sup> कार्डबोर्ड से खिलौना रोबोट बनाना	https://youtu.be/tqe-IgQofjU
19 <sup>th</sup> Nov	रोबोटिक्स की मूलतत्व भाग २ <sup>:</sup> चलने वाला रोबोट खिलौना बनाना	https://youtu.be/mpeYsZ5CROk
26 <sup>th</sup> Nov	रोबोटिक्स की मूलतत्व भाग ३ <sup>:</sup> स्मार्ट रोबोट खिलौना बनाना	https://youtu.be/Lq2KS8ntAAk

### ATL Andra :

Yogasree is based in Vijaywada. She is co-ordinating with Samagra Shiksha and Govt officials to select twenty ATL schools for model ATL project. She is visiting ATLs and preparing action plan for project implementation.

## I] Crises in IIE Board of Trustees

There is no progress on deadlock in IIE situation. Matter is sub-judice. We are facing cash flow problem. In order to continue our activities, we have decided to conduct activities in partnership with sister NGOs. We have decided to implement some of the program in partnership with Stars Forum, Anubhav Pratisthan, Nisargayan, VATF, Vrusksh foundation and others. New projects will be implemented by these organization till admin and financial issues will get resolved. It is also decided to raise funds from friends of Vigyan Ashram using DanaMojo online crowd

funding platform. We are also requesting life members of IIE to address these issues at earliest.

# J] Other tit-bit:

i) Vigyan ashram was felicitated by 'Corona Yoddhaa Sanmaan (कोरोंना योद्धा सन्मान) by Mahatma Phule cretic co-operative and Varad Motors at Pabal on 5<sup>th</sup> Nov. Mr Kailash Jadhav accepted the award on behalf of Vigyan Ashram.

Vigyan Ashram was felicitated on 26<sup>th</sup> Nov at Balgandharva Natyagruh,Pune on the occasion of celebrating 75<sup>th</sup> years of Independence. Pooja Jadhav accepted the honor on behalf of Vigyan Ashram.

ii) Wikipedia Marathi update: Team



Corona Yoddha Sanmaan

completed scanning of 5 books (1378pages) from Samarth Vidhya Arogya Kendra (Nasik). Team will convert them into OCR & publish on wiki-platform.

iii) ACADAM (<u>www.acwadam.org</u>) donated 6 used laptops to Vigyan ashram. It will be used in training of student at Pabal computer centre.

iv) Ranajeet, Yogesh visit to 'Anubhav Pratishtan Trust' Khopoli on 27<sup>th</sup> November to explore areas of collaboration.

 v) We registered daily-wage based employees on campus with 'e-shram card' initiative for unorganised sector labour force. It will help them to recognized under different government supportive initiative.



75 years of Independance

vi) Weather record – Rainfall of the month -18.39 mm (Total: 595.68 mm) ,Max temp-38.00 °C, Min Temp –15.00 °C , Humidity – 77% , Water height in well– 6.10 Mtr.

- vii) Energy consumption record- Electricity unit III Phase -1660 units , I Phase import- 234, Solar generation- 2309. DG used – 08.00 Hrs. (16 lit diesel).Quality of power : Number of interruption-40, Normal voltage : 80.28%, No supply :10.52%, low voltage :0 % , No supply: 9.20 %
- viii) Animal Husbandry section update Milk production 467.50Kg, Poultry –35 birds sold in November month
- ix) Biogas produced-17.58 M<sup>3</sup> (Dung used-439 Kg), E-rikshwa uses- 684 Km (Electricity cost-Rs.184.60)
- x) Donation : Mrs.Vidya Kasargod Rs.51,000 , We are thankful to donor for their continuous support.
- xi) Online visitors: www.dsttara.org 730 (New visitor-654 Repeated- 76), www.vigyanashram.com – 891 (New visitor-719 Repeated- 172)

# K] Data Report:

https://docs.google.com/spreadsheets/d/1v52DKo5EOa imMdHW1tMIoTRLqUmhxiM/edit?us p=sharing&ouid=101141840668207826730&rtpof=true&sd=true

(Work of VA is supported by Asha for Education, Praj foundation, EATON Foundation, L & T infotech, SPA Education Foundation, INDUSA Endowment, Govt of Chhattisgarh, Savitribai Phule Pune University, Suzlon foundation, LA Fondation, Dept of Science & Technology, and many individuals and foundations)

#### **Photo Gallery:**



ATL session : Smart phone robot

Bio Technology team with their culture isolation work



DBRT Students of Naramadalaya @ Ashram



Diwali Celebration on Campus



Weed control @ DBRT



**Electric Practicals** 



Learning Welding : DBRT



Community Service : Fabricating gate

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