

Vigyan Ashram Status Report

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First solar village - Kharkali in Kathiwada (M.P)

We have sold & installed solar LED lights in 100% homes of Kharkali village in Kathiwada(MP). This is very poor, tribal village. Congrats to Ashish, Aniruddha and all Vigyan Ashram - BOPEEI team on the field to make it happen !

The project activities were started in Kanker district of Chhattisgarh in collaboration with 'Vrutti'. As part of VLE training, 1 day assembly training was held at lakhanpuri near Kanker for 7 VLEs and 4 staff of 'Vrutti'.

As a part of World bank consultancy support for scaling up, we have engaged M/S Fuzhio Health & Business Services Pvt Ltd (part of Catalyst Group of Organizations (CMS)) to provide on field marketing and scaling up consultancy services. Support include on field marketing support from senior marketing person of M/S Fuzhio.



Instructor training programme @ Dantewada

Refreshing instructor training programme was conducted for instructors in 17 porta cabin schools in Dantewada district @ Dantewada. The training programme was scheduled in 2 batches for 68 instructors. The first batch of training was conducted during 1st to 14th May for Engineering and Energy & Environment instructors and second batch of training for Agriculture –Animal husbandry and Home &Health instructors was conducted from 19th May to 2nd July. We have given emphasis on improving basic skills of instructors. We have also included soft skills and project management with the help of two interns (Mr.Abhishek and Ms Atima) from TISS working as a training co-ordinator for the program. They also helped in integrating work activity with curricular areas. cabin, trained in different skills like basic welding, carpentry, ceramic molding, electrical, LED lamp making, basic crop cultivation, food processing etc.

Training programme was conducted in karli porta cabin school and District Collector attended the valedictory session of the program.



First batch of IBT Instructor training @ Dantewada porta cabins with Education officers Dantewada

Suzlon Foundation :

Suzlon foundation sanctioned proposal for implementing IBT in 5 schools for the academic year 2014-15. The support include cost of instructors and VA technical support to schools in suzlon project areas. The schools are Nagaj, Walsang, Thangaon, Shanimandal and Jamgaon.

FAB ASIA Network (FAN 1) conference

Yogesh attended FAN conference at Bohol, Philippines from 2nd – 7th May at the invitation of University of Bohol and Dept of S&T, Philippines. He gave a talk at symposium on 'Development.X' and also participated in different workshop on innovation and rural technology. FAN is the network of Asian Fab Labs and purpose is to collaborate in spreading Fab movement in Asia. This conference was hosted by Dept of S & Tech, Philippines and Bohol University. There are many similarities between Philippines and India and hence we could contribute in many local technical challenges.

Yogesh also met team from National University of Singapore (NUS) at Singapore and discussed progress of COSMIC project.



Fab Academy course

Fab Academy course is designed for Fab Lab Managers. The course is offered through video lectures every week followed by hands on project work in the Fab Lab. We tried to attend the video lectures in the past but could not complete the course due to connectivity issues. This year we have decided to attend the video conferencing classes from Pune office. Pradnya, Suhas, Tarunima and Amitraj appeared for the course. They also worked from D-I-Y Lab, Pune to complete their assignment in given time. This course started in January and will complete in the first week of June.

DST core support project-

1) De-humidifier dryer trial –

De-humidifier dryer is tested for drying efficiency, automation, calibration etc for drying mango pulp and leafy vegetables (cabbage). After successful testing of both the units, detailed operating & maintains manual is prepared and made ready for final shipment.

2) Hand operated rice de-husker-

New prototype design of hand operated rice de-husking is made and fabrication work was started after field testing of first version. Modifications are made in the design as per feedbacks received from SHG members during field testing at Chiatanya NGO, Rajgurunager. Mr.Sanat Prabhukhanolkar and Nilam Shirsat (Dr.B.S.K.K.V, Agril B.Tech students) are working on this project.



New prototype design- Hand operated rice de-husking machine

3) Fabrication of hand operated oil extractor (Anupam Ghani)-

Work on fabrication of 5 units of hand operated oil extractor (Anupam Ghani) is started in workshop section. Anil Gadhe and DBRT students are fabricating these units against order from SGS wealth creation Pvt Ltd.

4) Aquaponics trial – Short note & new trial

A short note is published on results of aquaponics tomato crop trial with details of yield comparison, soil analysis, fish growth etc. Report is available on VA wordpress blog www.vigyanashram.wordpress.com. A fresh trial on cabbage crop is started under aquaponics experiment. This trial aims to study effect of aquaponics system on leafy vegetables. Total of 362 cabbage seedlings were planted with same set of experiment (control -165 & Aquaponics-197 seedlings)

DBRT programme (Supported by ASHA for education) –

During May month DBRT students were busy in their practical work and project submissions. Following are the important highlights of DBRT programme-

1. DBRT workshop students repaired finishing school building shutter. The shutter was not working smoothly due to problem in supporting structure & springs. Local vendor from Pabal village were not responding for on-site repair work therefore instructor & workshop students did repair of its spring mechanism in house.



2. In Energy & Environment section students learnt motor rewinding and house wiring work while performing different maintenance work in campus.
3. Home & Health section student Gaurav Deshmukh worked on new recipe named *wheat thin-biscuits*. These biscuits are made wheat bran under healthy food category with rich source of fiber.
4. In Agriculture & Animal Husbandry section, students started new batch of poultry farming with 350 chicks and performed vaccination, Feed conversion ratio (FCR) calculation for poultry activities. Students also tested 8 soil samples & prepared report for Srinivas service trust (TVS group CST) community service.
5. Marathi newspaper - Lokmat , published information about Vigyan Ashram's DBRT course in their supplement on 23rd May. Newspaper Pudhari published news about dryer on 4th May.

DIY Lab activity-

- 15 students FROM Khelghar attended 4 weeks Summer camp at D-I-Y Lab. It was organized between 22nd April – 15th May. They carried out various projects on energy, scrap recycling & home gardening etc.
- We have submitted following projects for Global Fab Award competition –
Heat Rention Box : Pradnya ii) Geodesic dome : Jui iii) Leaf wetness duration sensor : Tarunima



Volunteers :

- i) Emma Crichton (EWB volunteer) joined VA for 6 month volunteering. She will work on different design and content development project with DBRT students and IBT Schools.
- ii) Sanat Prabhukhanolkar and Nilam Shirsat (Dr.B.S.K.K.V , Agricultural B.Tech college Dapoli 3rd year student) joined for their 1 month summer training programme. They will be working in engineering section for developing 'Hand operated de-husking machine'.
- iii) Ms Satvika Negi, student of Carnegie Mellon University visited from 19th – 21st May to prepare proposal for volunteering opportunity for students of their university.

Other tit-bits-

- VA staff and Students accident insurance policy is renewed with The New India Assurance Co Ltd.
- Mr.Anand Gosavi and Mrs.Sonali Gosavi resigned from Vigyan Ashram to do farming at their native village. We wish them all the best for their future endeavors. Mr.Yogesh Kenge joined Vigyan Ashram as DBRT course co-ordinator.
- Mr.Doug McIldowie and Mr.Ujjal Bhattacharya from GNK sinter metal, visited VA campus on 7th May to take review of finishing school project.
- Mr.Rohit Saroj from TATA motors (CSR) visited VA on 9th May to explore possibilities of collaborations.
- 2 Domes in campus are re-painted with water proofing sealants as regular maintainance work.
- 20 trainee engineers from GKN sinter metal Pvt. Ltd visited Vigyan ashram.

- Weather record – rainfall of the month -2.7 mm ,Max temp-37.17°C , Min Temp –22.64°C , Humidity – 47% , Water height in well – 6.93 M
- Energy consumption record- Electricity unit – Three Phase - 1457 KWH, Single Phase -462 KWH Diesel consumption for generator- 5 Lit.
- Cow milk yield record- Income – 798.4 Lit milk + 1608 Kg dung (Gross Income Rs. 18453.00), Expenses – Rs.16322.00
- Biogas consumption – Dung used- 1842 Kg, Gas produced- 31 M³.

Data Report Link-

https://drive.google.com/file/d/0B_Jk2xLqAXjcU0xjbkd0VnlQdIU/edit?usp=sharing

(Work of Vigyan ashram is also supported by Asha for Education, INDUSA, UNICEF, Govt. Of Chhattisgarh, Lend-a-hand-India, Suzlon foundation, Wildlife Conservation Trust, Dept of S & T , RGSTC, Praj Foundation and Many Individuals and foundations)

o Gallery:



DBRT Students learning motor re-winding skills



DBRT workshop students performing dome painting work



Yogesh with Fab Lab Philippines team at Bohol



Mr.Duug McIldowie (GKN Sinter Metal Plc) during his campus visit