

# Vigyan Ashram Status Report

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### **A] Design Innovation Center (DIC) at VA**

Vigyan Ashram entered into agreement with Savitribai Phule Pune University (SPPU) to start DIC at Pabal. The center will focus on developing solutions in the areas of – Sensor Technology, Product design, Watershed and Waste management, Agriculture and plant growth.

SPPU is one of the 10 universities in the country which will start DIC. VA will function as a spoke center of SPPU. Purpose of the center is to promote design culture and philosophy at university and college level. The center will get initial financial support from Ministry of Higher Education through SPPU. Through this center, VA will conduct design courses (Level-5) in the above areas. They will be certified by NSDC and SPPU.

We have decided to use first floor of new kitchen building for DIC. Accordingly we are working towards completion of first floor of the new building.

### **B] Fab Lab Updates**

**i] Pre Fab Academy session :** VA is a center of Fab Academy and we have 4 admissions for Fab Academy 2016. Mr. Francisco Sanchez from Fab Lab Sitges is our remote guru. He visited VA on 15<sup>th</sup> and 16<sup>th</sup> Nov. He had conducted pre- fab academy session for new students as well few aspirants. He also reviewed some of the incomplete projects of the batch 2014.

#### **ii] Pune Makers Meet**

First 'Maker meet' of Makers in Pune was organized on 1<sup>st</sup> Nov at J.P Naik

Center. It was attended by 50+ makers from Pune. They were from areas like Robotics, electronics, product design, softwares, Weaving clothes, origami, agriculture etc. We have discussed collaborative efforts to promote Makers culture in Pune. It is decided to organize atleast one program of 'Makers !' every month. The group is also actively using social media viz whatsapp and facebook.



**Fab Team with Francisco**

iii] Fab Class for DBRT students: A fab class has been started for DBRT students. This will be in addition to their DBRT course and hence they will work on their weekly off i.e Saturday. They will do different projects in the fab lab.

**D] Technology Development** - Following are important updates on technology development.

i) Hydroponics for fodder cultivation – To tackle drought situation, Govt of Maharashtra has decided to promote hydroponic for fodder cultivation. By considering our work of developing 'low cost hydroponics fodder cultivation unit', Directorate of Agriculture (State agriculture Department) included Mr.Ranjeet Shanbag in the CORE expert group. The first meeting of CORE expert was held at Sakhar Sankul (Pune) on 6<sup>th</sup> November. Vigyan ashram will help on development of 'low cost hydroponics fodder unit' as per the government approved design and also provide trainings to farmers under agriculture department support.



Hydroponic unit

Accordingly, we have started

development of Green fodder machine. We have fabricated unit of 9 ft \* 9ft \* 8.5 ft. It will 108 trays and estimated to give 30-35kg of green fodder per day.

ii) Bike Mounted HTP pump – We have developed & tested first version of HTP (horizontal triplex pump) attachment. It can be attached to any motorcycle and drive is given by simple friction. It will help in taking spraying machine inside the field easily.



iii) Incinerator : First 10 units of incinerator are ready. They will be given for testing in the field.

iv) Vigyan Ashram featured on NDTV , 28<sup>th</sup> Nov in the series 'India Innovate' <http://www.ndtv.com/video/player/india-innovates/how-innovators-overcome-the-barriers-to-effective-innovation/392655>

v) Yogesh attended group monitoring workshop of DST supported projects as an experts at Panchgani on 27<sup>th</sup> Nov. The projects were on promoting livelihood and reducing migration.

## E] Entrepreneurship Accelerator

Fellow's progress –

- Jayesh Dhayarkar – Jayesh is working on Aquaponics and Hydroponics fodder unit project. His goat farming business proposal is finalized and submitted to RangDe. He is planning to start goat farming unit with the investment of Rs.1.2 Lac and initiated land development and goat shed fabricated work. He is completing his fellowship tenure in January 2016.
- Akshay Palkar – Akshay is working on 'improvement of Rice De-husking' and 'plastic waste balling press' project.
- Phuleshwar Ram- Phuleshwar is placed with Mr. Papu Gadekar (Kendur) for learning 'Motor re-winding' work. He will learn advanced motor repair skill for next 1 month and also work on project. He has not finalized his start-up plan but he want to establish home appliance repair shop at Balrampur (CG).
- Soari Ram – Newly joined and he is working at VA workshop on various developmental projects.
- Pawan visited Jawhar from 24<sup>th</sup> – 26<sup>th</sup> Nov to meet DBRT alumni. Objective is to mentor and help them in their career plan.



## F] DBRT Update:-

- i) New water pump was installed in the campus well. We were using 3 Phase (3HP) motor pump since 2005. Now it requires major maintenance (overhauling). New pump is capable to pump 250 to 300 LPM water by using 1 Phase electrical supply. Students did wiring and installation of the pump and earthing.
- ii) New fodder crops are introduced in the Animal husbandry sections. These fodder varieties are brought from BAIF Urali Kanchan. The fodder varieties selected are - BAIF Bajara -1 , Oat (*Avena sativa* L) and Berseem (*Trifolium alexandrinum*).
- iii) Seedlings nursery – DBRT students planted 3000 seedlings of Chilli and 100 plants of Drumstick against order from farmers. DBRT

students are also learning basic agricultural skills by cultivation of Jawar (2 Acre) , Maize (10 Gunta) and Oat (5 Gunta).

iv) New cow purchase – We have purchase new cow for Dairy unit. This cow is brought from local farmer on 26<sup>th</sup> November. Cow is approximately 8 Years old and potential of producing 15-20 lit/day. New cow is purchased @ Rs.28000/-. Osmanabadi goat delivered He-Goat (बोकड) on 27<sup>th</sup> Nov.

v) DBRT students made sky lantern for Diwali ! It is fitted with light sensors device to operate the light.

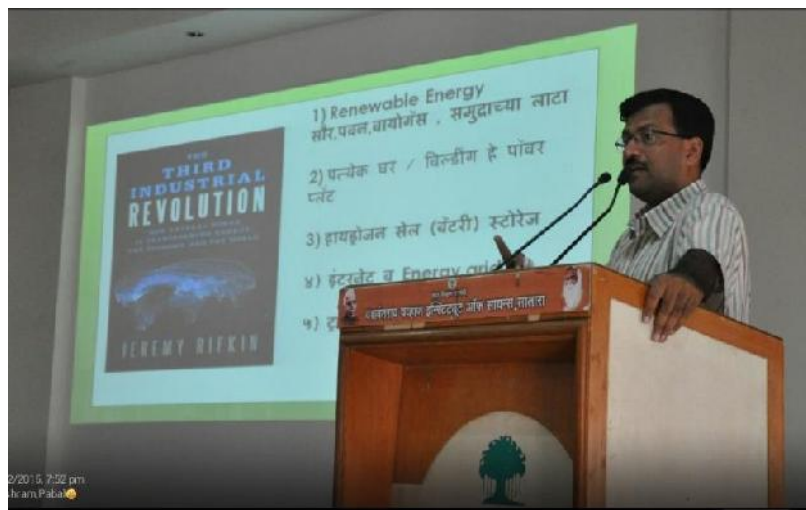
vi) Students were on Diwali holidays for 10 days.

### G] IBT Updates:-

#### i] IBT in Maharashtra:

i) Yogesh and Farzana participated in the State level consultation on National Education Policy on 5<sup>th</sup> Nov at Mumbai.

ii) Yogesh gave a talk on 'Skills training in school education' at conference on 'Maharashtra 2015' organized by Rayat Shikshan Sanstha and Yashwantrao chavan Pratishthan at Satara on 28<sup>th</sup> Nov.



iii) IBT Instructors training program for newly appointed instructors was conducted at ashram



from 24<sup>th</sup> Nov to 28<sup>th</sup> Nov. Total 36 trainees from 19 schools participated in the training. The main objective of this program was to introduce new technologies/productive activities and design thinking teaching methodology to improve training quality at school level.

iv) IBT Family Whatsapp group completed 1 year on 25<sup>th</sup> Nov. We have 260 members in 4 Whatsapp groups in 3 states (Maharashtra,

Chhattisgarh and Odisha). Last year group shared more than 8000 photos of IBT activities. We have launched new activity on another social media site 'hike !'. Name of the group is 'IBT Training Content-VA'. We intend to share PDF, PPT, and Video on these apps. Hike can accommodate 500 members and hence all our schools can register on it. We called this 'M-Learning (Learning through Mobile)'. It is launched at the hands of Mr.Vinayak Kelkar (Praj foundation) during IBT training.

v) On Laxmi Poojan day, IBT IXstd Students measured noise level at their village using mobile app!(noise watch). Readings are average noise level between 7-8pm. Shindavane(72db).Mukhai(90db),dhamari(78db),wadachapat(46db),Gawadewadi(46db),Nasik(78db).

### ii) Odisha IBT Program :

a) DFID officers Ms. Arundhati Roy and Mr. Shantanu visited 3 IBT schools in Koraput and Nabrangpur districts on 2<sup>nd</sup> and 3<sup>rd</sup> Nov.

b) We have conducted base line survey of students. Sachin has designed questionnaire and conducted the study.

c) IBT student of SSD Govt. High school, Sialati, Nuapada district prepared strong foldable meeting table of size 8ft X 2ft X 2.5ft in their practical. Total cost incurred is Rs. 2305/-.



### iii) IBT in Chattisgarh :

a) 4 IBT schools planted 2 quintals potato seeds in their agri practical's.

b) IBT stall was put up at Child rights convention organized by Unicef at Raipur (chattisgarh) on 20<sup>th</sup> Nov.

c) Monthly meeting of all Instructors was conducted on 11<sup>th</sup> Nov at Dantewada.



68 instructors from 17 porta cabin schools attended the meeting.

### I] Other tit-bits-

- i) Ranjeet and 2 TIED fellows and farmers group from Pabal visited KRUSHIK-2015 agricultural exhibition held at Baramati on 6<sup>th</sup> Nov.
- ii) Loksatta published a book of articles on social organizations featured in their series during Ganesh festival. VA is one of them. Vishal attended book release function at Mumbai on 24<sup>th</sup> Nov.
- iii) Yogesh attended meeting on promoting maker spaces in India at French consulate on 6<sup>th</sup> Nov. Yogesh also attended meeting of RGSTC at Mantralaya on 6<sup>th</sup> Nov.
- iv) Weather record – rainfall of the month – 37mm, Rainfall YTD – 480 mm, Max temp-27°C , Min Temp – 16°C, Humidity –64% , Water height in well – 4.8 M
- v) Energy consumption record- Electricity unit – Three Phase - 751 KWH, Single Phase – 755 KWH , Quality – No. Of interruption- 125 , No supply -49.75hrs. No supply – 13% , Normal Voltage – 83.08% , Low Voltage –1.25 % , High Voltage- 6.94%
- vi) Diesel consumption for generator- 0 Lit , Two wheeler running- 480 Km.
- vii) Biogas consumption – Dung used- 940 Kg, Gas produced- 35.4 m<sup>3</sup>
- viii) VA online visitor – [www.learningwhiledoing.in](http://www.learningwhiledoing.in) – New-763 , Repeated –125 ,[www.dsttara.org](http://www.dsttara.org) – New-407 , Repeated – 68,[www.vigyanashram.com](http://www.vigyanashram.com) – New- 1411, Repeated –495 ,[www.vigyanashram.wordpress.com](http://www.vigyanashram.wordpress.com) – Visitor – 2092, Viewers –899. Noted author Ms Rashmi Bansal visited VA on 28<sup>th</sup> Nov.

### Data Report Link-

NA

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

### Photo Gallery:



Incinerator at getting ready



IBT stall @ Child right convention organized by UNICEF @ Raipur



IBT Instructors Training @ Pabal



Maker Meet @ JPNC on 1<sup>st</sup> Nov



DBRT students – fab class



Sky Lantern : Diwali



Visit of DFID team to Odisha EMRS IBT program



Despatch of rice husk machine

For regular update : <https://www.facebook.com/vigyan.ashram.pabal>