

Vigyan Ashram Status Report

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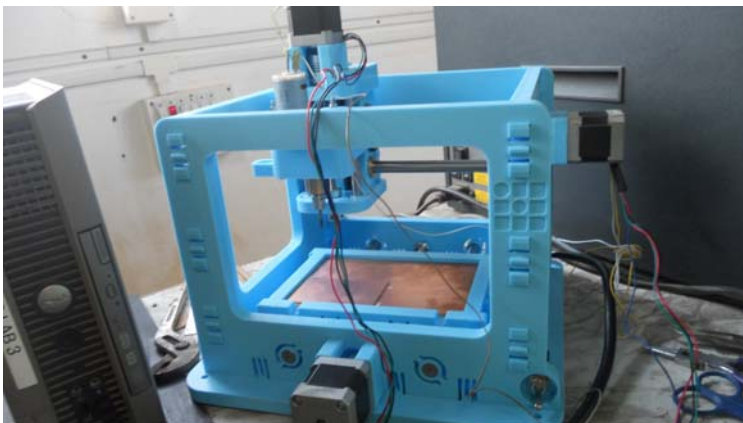
- IBT refresher Training Program in Dantewada
- MTM Snap Machine successfully installed and commissioned
- Water tank in Gotha(Dairy) collapsed
- Suzlon foundation donated furniture to VA

IBT refresher Training program at Dantewada



Instructor training program was conducted from 9th – 11th Jan at Zillha Panchayat training center, Dantewada. 39 instructors from 8 schools participated in the training. Instructors were introduced to IBT books in Hindi language. Students were taught to identify community service areas. As a sample, they carry out all fabrication – electrical repair work in Z.P training centre and got appreciation from the Govt officials. CEO of Dantewada was chief guest for the valedictory function and he assured all help for increasing

the scale of the IBT activities. Team from VA also met District collector of Bijapur and discussed issue related to launching of IBT in remaining 5 new schools. He promised to initiate the tool purchase soon.



MTM Snap Machine

Chintan Vaishnav from MIT(USA) visited VA from 16th – 19th Jan. He brought with him spares of MTM snap machines completely made on the Fab Lab machines at MIT. MTM Snap m/c is a desktop CNC milling machine. Mahesh , Pawan assisted Chintan to assemble the machine in Pabal and commissioned it. We are able to cut PCB on this machine.

Video of machine at Pabal is available on : <http://www.youtube.com/watch?v=o9XO8Jo04w0>

Prof. Alex Slocum and Dr. Nevan Hanumara both from MIT – Mechanical Engineering dept. visited Pabal on 16th Jan. We brainstorm many project ideas with them and they also met farmers group in Jategaon.

Water Tank collapsed

M/S Sintex water tank of 2000 lits was installed on a stand of 10ft height near dairy and goat farm. Construction was over in Dec 12. Tank was in use and was filled on 7th Jan. Sharp edges of angles cracked the foundation and tank came down from height. It was completely broken, fortunately no one was around. We asked students who had done the job to do the assessment and detailed report on cause of accident and learning was made. Following faults were recorded:-

- i) Not proper estimation of weight of tank and the foundation capacity was done.
- ii) Angles of the stand were directly inserted into the foundation. The load should have distributed over larger surface area.
- iii) Proper settling time and watering was not given to foundation.
- iv) Total loss to VA due to this accident was Rs.7500/-. We are going to rebuild it with proper care.



Donation from Suzlon Foundation

Suzlon foundation donated lot of their old furniture. We receipt three truck load of furniture. It comprises of: →

- a) Cupboards 32 nos.
- b) Theater chairs 32 nos.
- c) Computer table 4 nos.
- d) Reception table 2 nos.
- e) Marble top table 1 nos

This will solve major requirement of all dept especially accounts dept of cupboards. We have send some of the material to Pune office as well.

We are thankful to Suzlon for their support.

Introduction to Basic Technology (IBT) – PLAN 100 update

(Supported by Asha for Education, Unicef, Govt of Chattisgarh, Lend-a-hand-India, Suzlon foundation, Hemendra Kothari Foundation)

i) Meeting with Director of Vocation Education and Training (DVET)

Dr.Yogesh gave presentation about IBT program, its benefit and expectation from DVET to Director, Vocational Education (DVET) and all Jt.Director at Mumbai on 2nd Jan. IBT principal Mr.Bombale (Gawadewadi) and Mr.Pansare (Hingangaon), Mr.Anandrao Patil and Mr.Kiran Inamdar (HKF) attended the meeting.

Director assured that they will involve us in the committee being formed for restructuring of pre-vocational program.



ii) Omkar conducted training session on exam scheme, drawing for IBT - SSC students of Pokhari high school on 21st Jan.

iii) Omkar attended meeting at SSC board to check third proof of Xth std IBT manual on 31st Jan and 1st Feb.



iv) A group of Senior Govt officials from Assam visited VA on 18th Jan to understand our model. Visit was organized by Yashada as part of their training.

iv) IBT camp was conducted in three school in Madhya Pradesh – PENCH in collaboration with Ashok Piramal foundation on 26th and 27th Jan. Total 140 students participated in it. Students were given training on LED torch, Hand pump model , DC motor , Solar mobile charger etc.

v) Vishal visited Talasari, Kurze, Vikramgad and Bargaon pimpri high school. He discussed IBT

projects and SSC exam preparation with school principals. We also took follow up of IBT alumni of previous year 2011-12:→

School	Total student	IT I	Diploma	Science	Commerce	Art
Talasari	46	10		20	06	10
Kurze	60	15	08	07	10	20
Bargaon pimpri	49	1	9	15	12	12

vii) Pench and Tadoba IBT project (Supported by M/S Hemendra Kothari foundation)

- i) A review meeting was held on 22nd and 23rd Jan in presence of Mr.Kiran Inamdar. It is decided that Omkar will take responsibility of HKF project. He will be based in Ramtek to make model IBT schools.
- ii) Omkar and Kailash visited Nagpur from 28th – 30th Jan. They planned IBT stall during coming sports competition. It is also planned to record all IBT accounts of Pench school in Tally.
- iii) Kailash also visited Pench-Tadona schools from 7th – 10th Jan.
- iv) For more details : <http://hkf-vigyanashram.blogspot.in/>

viii) Suzlon supported IBT program

- i) Nagaj school started practice of asking students to deposit fees directly to IBT bank account. This helps in students understanding bank operations. It also helps in school getting computerized record from bank.
- ii) Suzlon foundation team of Mr.Vikram Mehmi and Ms Seemantinee Khot visited VA on 28th Jan to understand VA program and present status of IBT project. They also visited Aichale, Sakri, Ashram school- sakri, Shanimandal IBT program. The schools are running the program without financial support. A review meeting was held at Nandurbar on 29th Jan.



iii) IBT highlights

- i) Talasari IBT food dept earned Rs.1500/- by selling food products in sports competition.
- ii) Walsang school made 425 plants of Gorad tree. Students also repaired two wheeler of Mr.Babu Chavan.
- iii) Chadwel Students checked blood group of 50 students. Value Rs.500/-. They also did wiring of school office.
- iv) Khondamali school constructed a separate room for IBT dept. Students did the wiring.
- v) Shanimandal school students carried out welding repair of Mr.Bhaskar Patil and earned Rs.300/-

DST Core Support Projects:

A] Oleoresin Project-

We have taken trial on grape seeds. Oil from grape seed is commonly used in anti-wrinkle/ anti-ageing creams. We have feed the reactor with 910gm of grape seeds and apply the pressure of Pressure 180 Bar for one hour. We could hardly get any oil (2 gm) from the seeds. But following problems observed. Problem faced / Next action –

Problems faced	Next action
Rubber ring got expanded under pressure and gots damaged @ 180 bars.	Replacing normal rubber pressure rings to Viton O ring.
Reactor temperature need to be maintained at room temp by making heating arrangement for fast extraction and pressure build up.	Design of reactor need to change with heating/ cooling system.

B] Dryer – While conducting trial to dry cauliflower leaves, it is found that dryer is not cooling enough because of RHR gas leakage. This is due to leakage in RHR from piping. We brought 2 Kg RHR gas @ 400 RS/ Kg from Pune market. We will take further trial.

C] Farmers Club-

Pabal Producer Organisation has outsourced DPR preparation work to Prajakta technology Pvt Ltd (Mr.Atul Mordikar) a Pune based food processing consultancy firm. We have asked extension of date to NABARD.

D] Aquaponics Project-

Work on aquaponics project started has started. Polyhouse is repaired and curtains of 50% shed net is fixed. A paper lined farm tank of around 1 lac lit capacity is build. We brought Fish yearlings (1 year old) from Ratnagiri (Pangasus breed – 100 No.) and released in newly build farm tank.

We also brought plastic bed (troughs) and installed (50 M / 6.5 beds) in polyhouse. We also made some bed in house to save cost. We have also ordered Cucumber seedlings are booked with Kumar biotech (@ Rs 10 each) and soil / water testing done.

E] Quality test of water

This is found that our water is having very high level of EC (Electrical conductivity) @ 1.76 Ms/cm. (Hardness more than 650 ppm [recommended 100 ppm] this is mainly because drought conditions and heavy ground water harvest). This is harmful for plant growth and not easy to reduce down. We are planning to produce distilled water (with 0 TDS) using solar and maintain soil EC below 0.7 mS/Cm.

F] Praj Animal Husbandry Proposal-

Poultry shed work has progressed up to roof level. Roof sheets are fixed and construction of side wall (ferro cement) is in progress.

G] Fodder making Machine –

Trial of fodder sprouting machine are going on. Humidity obtained is still remains very low (Required 60 %, achieved 15 – 20 %). Because of less humidity, time required for achieving weight gain (growth of sprouts) is longer than expected (Expected 7 – 10 days, now its 15 - 20 days). We are working on the causes of not getting required humidity inside the chamber. We



We have installed fogger system and four exhaust fan in the system.

H] Manchar agriculture exhibition-

We have participated in Agriculture exhibition organized by Manchar Krushi Uttpanya Bajar Samiti, from 23rd to 27th Jan. Anil displayed Amla cutter machine, Egg incubator, oil extraction machine etc. We also put all our food products like low fat chikki , pooran poli mix , woodapple jeely , Amla candy etc for sale.

I] FP 7 proposal

Vigyan Ashram has submitted a proposal on 'Village Ecology : Waste management and Energy' in FP7 proposal competition organised by European commission. We are participating in the collaborative proposal on social innovation with Goldsmith College (University of London,UK). The proposal was submitted online on 31st Jan.

F) INDUSAPTI

i) Open Education Resources (OER)

OER editing workshop was held at Homi bhabha center for science, education and research (HBCSE) from 23rd to 26th Jan. Anand, Ranjeet and Yogesh attended the workshop. Total 18 OERs were completed and uploaded on <http://oer.nios.ac.in/> . NIOS organised the workshop and team from HBCSE helped in editing the content. We have raw material ready for 21 more OERs and which will be complete soon.

ii) Pankaj Shirke joined VA as a co-ordinator for INDUSAPTI projects.

For more details on :→ www.learningwhiledoing.in

G] A project to make rotor device for turning bed in poultry is given to for students of polytechnic college.

For more information on DST core activities. visit <http://vigyanashram.wordpress.com/>

DBRT update (Supported by Asha for Education & Tech Mahindra Foundation)

1) DBRT result: NIOS declared result of DBRT 2011-13 batch. Out of 50 students who appeared for the exam, 31 passed the exam and 10 students need to reappear again.

2) We have submitted application for recognition as a 'Vocational Training Provider (VTP)' for modular courses under MES scheme on 23rd Jan.

3) Gossaigaon, Assam : On invitation of Vivekanand Kendra & District Govt. we send our instructor Mr.Sandeep Junnare to conduct one month training program in Electrical wiring & appliances repair at Gossaigaon (Assam). Training started from 16th Jan in camps of riots victim.

3) Republic Day Celebration:

Republic day was celebrated with enthusiasm. Shramadaan was done by all staff and students on 25th Jan. We have put grey water filtering system for the used water from staff quarter. It will be passed through soil and charcoal filter and then will be used for nursery. A nursery was also constructed through Shramdaan.

On 26th Jan, after flag hosting various cultural programs were presented by staff & students followed by sports competition.

4) Food Processing-

Mrs. Rani Jadhav has visited SHG exhibition in Mumbai and sold products of around Rs.25000.00 , where as Mrs. Sunita Jadhav has sold Amla candy and chikki products worth Rs. 30000.00 in same exhibition. Pramod Pansare and DBRT students attended 2 exhibitions (Manchar agri exhibition and Bhimthadi in Pune) and sold food products of around Rs.20000.00 500 packets of chikki was sold to Praj foundation on the occasion of Makar Sankranti.



[Production: 20kg sauce, 25kg Lemon pickle, 12kg wood apple jelly]

5) Poultry: 70 chickens were sold on 19th Jan. From 8th Nov to 19th Jan, total expenses on poultry was Rs.4708/- and we earned Rs.5559/-. We earned margin of Rs.851/-. Mortality was 3%.

Other Tit-bits :

i) DBRT student Ms Asha reported chest pain on 26th Jan evening. Local doctor asked her to hospitalize in Rajgurunagar. She was shifted to Rajgurunagar and was in ICU for 2 days. She was send back with her parents for further treatment at her native place.

ii) Yogesh attended Executive committee meeting of IIE on 13th Jan at JPNC.

iii) Mr. Krishna Kranthi, alumni of S.P Jain Management Institute did his project with Vigyan Ashram. He wrote about his experiences in his recently published book "MBA is not about Money, Blazer, Arrogance". He wrote one chapter about his experience with Vigyan Ashram. He pledges to donate profit from the sale of book to VA activities.

iv) Environment:

Rainfall of the month: -- mm, total rainfall of the year: 433 mm

Water level in the well: 0.8 meter

Min Temp – 21.22 degree, Max temp – 25.67 degree

Humidity – 85.48 %

ii) Energy consumption:

Diesel: 8 lits, Electricity (MSEB): 544 units (3 phase), Single phase bill : 726 units

Biogas consumption – cubic meters

iii) Two wheeler – 295 kms, Petrol consumption: 11.1 lits (Rs.822/-)

Data Report- All section wise data report are available on Google pages:

<https://docs.google.com/spreadsheet/ccc?key=0An-4RfsZ2K2OdDRZcIltNVFYM0JPbGRSU3hkSEJvX2c&usp=sharing>

Photo Gallery:



Table made in IBT practical



Shramdaan , 25th Jan



26th Jan, Republic Day



Mr. Dilip Walse Patil visited our stall in Manchar exhibition.



Amla cutter made in ashram



Cultural Program – 26th Jan



Pawan, Chintan and Mahesh commissioned MTM Snap machine



Instructor Training @ Dantewada

January photo link –

<https://plus.google.com/u/0/photos/115031434407012310423/albums/5839851224667740433?hl=en>