

# Vigyan Ashram Status Report

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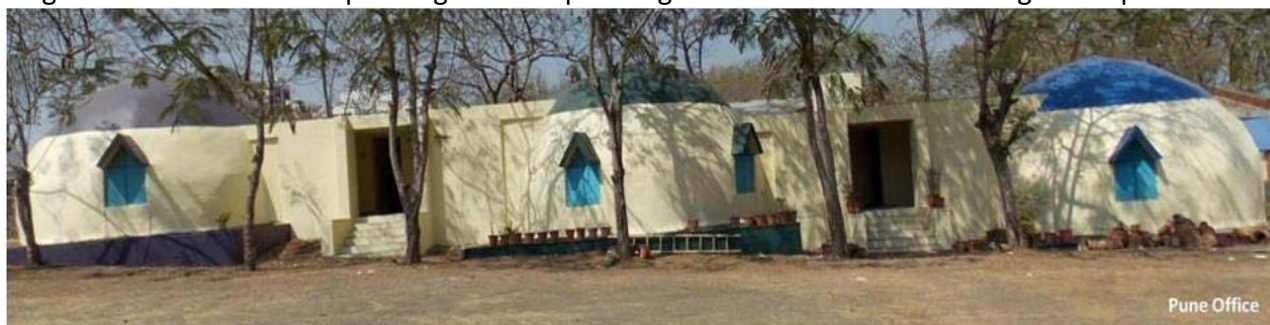
## In this issue

- D-I-Y Lab proposal got sanctioned
- DBRT innovations - String less Jhula and potato wafer's slicer
- DBRT students cycle trek to Lenyadri – Bhimashankar
- Progress of IBT in Pench – Tadoba project

### D-I-Y proposal got sanctioned

Rajiv Gandhi Science & Technology commission (Govt of Maharashtra) conveyed their sanction for D-I-Y lab proposal submitted to them. The project is to start D-I-Y Lab at J.P Naik center in Pune. This lab will have basic tools and facilities like Fab Lab. Anyone with an idea can use this facility and bring his/her idea to reality. We intend to make the lab operational by April 2013. We expect this lab will become a model for others to follow.

IIE gave contract for dome painting & water proofing for D-I-Y Lab and the work got completed.



### New DBRT student's innovation



chips in an exhibition.

1) DBRT students made string less jhula (baby swing). They got idea from similar experiment done by someone in Akola. There is no need to hang jhula from roof. They used RCC steel bars which gives spring action and keep jhula moving with slight push. It was tried on kids on campus. We made 3 units for sale.

2) DBRT Student Tushar made a potato slicer after taking clue from potato chips machine on website. You can have curly slice of potato's which can be fried to have a long wafer strip. They gave a demonstration and sold

### DBRT students trek to Bhimashankar

22 DBRT student and staff went for bicycle tour from 16<sup>th</sup> – 19<sup>th</sup> Feb. They visited Rural agricultural institute, Narayangaon, Ozar – Ganesh temple, Caves of Lenyandri and Bhimashankar. They covered 250 kms distance and have lot of fun and stories to tell.



### 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) PENCH – Tadoba school progress (HKF)

IBT activities picked up in PENCH-Tadoba schools with Omkar stationed at Ramtek to support the schools. Mr.Kiran Inamdar visited schools on 4<sup>th</sup> and 5<sup>th</sup> Feb to review the progress. Dahoda school celebrated first anniversary of IBT program on 13<sup>th</sup> Feb.

Highlights of IBT program in PENCH in Feb are as follows:--

1) Navjeevan high school , Patharai	1) Students fabricated two gates. 2) produce & sold 15kg of brinjals 3) Total value of community service – Rs.2480/-
2) Swami vivekanand Vidyalaya, Devalapar	1) IBT dept put up a stall in district sport competition venue. 2) CEO –ZP Nagpur, Teacher MLA visited IBT program. They purchased IBT products and CEO gave Rs.500 award to students. 3) Tested blood group of 71 students with the





3) Gurukul, Develapar



help of PHC doctor.

4) Student tested water of 4 villages. It is found that water of Bothiya palora village is not potable.

1) Total value of community service is Rs.4050. They took agriculture produce - फुल गोबी ( ०.३० एकर ) – १०७ किलो, मेथी – 141 किलो, कोथिंबीर – ९ किलो .

2) First batch of IBT students (30nos) appeared for SSC examination.

iv) For more details : <http://hkf-vigyanashram.blogspot.in/>

### iii) IBT highlights

Kailash Jadhav visited IBT schools in Konkan and Yawatmal this month. Objective was to guide schools for preparation for SSC exam. We also took review of work done & community services done by schools. Some of the highlights are :-

- 1) Bhandari high school, Malvan - Sold 3259 kg vermin compost & earn Rs.20772/-
- 2) Shankar Mahadev Vidyalaya, Kumbhavade - 1) fabricated 15 wooden benches for kitchen – Rs.25000
- 3) Earn Rs.8000 from rice crop.



Figure 1 Malvan IBT team made vermin compost

### iv) Instructors turned entrepreneurs

Following instructors from Mukutbandh left job and started their own enterprise in their village.

- 1) Santosh Parshive – Electric Shop
- 2) Mohan Mallatwar – Xerox & photography, DTP

### DST Core Support Projects:

#### A] INDUSIA Practical Training Institute (INDUSAPTI)

i) Pankaj Shirke finished his induction training and started working on website development and OER work.

ii) A review meeting with Asha for education representatives Jyoti Gawade and Mr.Shrikant Palkar was held on 2<sup>nd</sup> and 14<sup>th</sup> Feb at Pabal. We took review of [www.learningwhiledoing.in](http://www.learningwhiledoing.in) and also

INDUSA computer application for rural areas (CAREs) project. A need to engage user design expertise for the portal is identified.

iii) Yogesh attended NIOS advisory committee meeting at Mumbai on 12<sup>th</sup> Feb and in Pune on 19<sup>th</sup> Feb. We have submitted revised proposal to complete the OERs.

iv) Mahesh and Pankaj completed review of CD on fabrication and electrical engineering. The corrections were handed over to content developer.

v) A proposal for INDUSA CARE is submitted to INDUSA fund Dr.Kishan Bhatia. He conveyed his sanctioned for the proposal.

### **B] Oleoresin Project-**

Required modifications are yet to be done. Meanwhile we tried to take trial on Fenugreek (Methi) seeds with pressure of 200 bar for 2 hr but trial failed. We applied less pressure than required.

### **C] Aquaponics Project-**

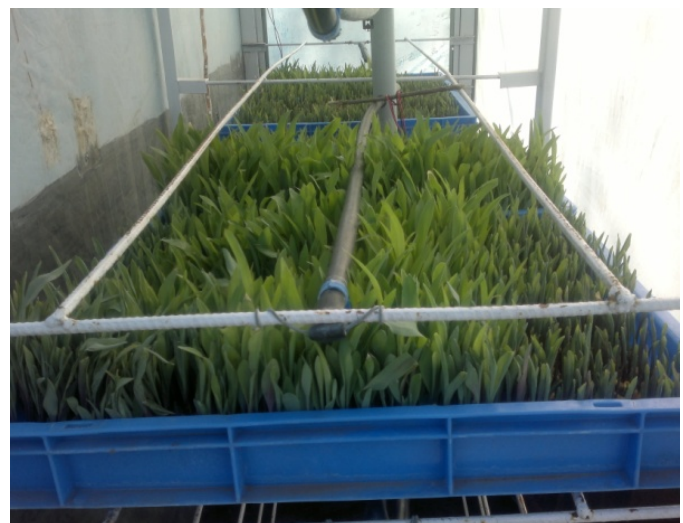
Cucumber seedlings are planted on 19th Feb @ 280 seedling for 14 beds ( 7 bed – controlled and 7 bed - Experimental). These seedlings are growing fine and achieved 5 leaf stage (height 10 cm) with all organic inputs (fertilizers and pesticides). We are monitoring plant and water parameters regularly and now, plants are growing fine with all organic inputs as fertilizer and pesticides. We are also monitoring fish growth and high water EC.



**E] Fodder making Machine** – A trial on fodder sprouting machine is in progress, in the latest trial we got t times weight gain instead of expected gain of 7 times (850 gm of grains converted to 2.350 Kg) in 10 day of sprouting. We are successful in avoiding fungus attack this time. We found the likely cause of less growth from information available on internet. We are starting new trials by controlling sunlight and humidity.

F] We have submitted two proposal to Development marketplace competition 2013. First is to introduce IBT in Madhya Pradesh in partnership with Aide-en-action. Second proposal is to provide solar lighting solution in partnership with Bottom of the pyramid energy and environmental innovative solutions Pvt Ltd.

G] GMRT exhibition – We participated in science exhibition at GMRT, Khodad and



displayed our technology project on 27<sup>th</sup> and 28<sup>th</sup> Feb and the occasion of science day.

H] Trial of new egg incubator started with 100 eggs on 16<sup>th</sup> Feb.

I] Anil completed order of poultry feed grinding machine from Mr.Gainbhau Goraksha Thakur (village-Thakur Pingale, Tal- Rajgurunager)

J] Ranjeet wrote about Azola cultivation in Agro One newspaper on 28<sup>th</sup> Feb and 1<sup>st</sup> March. It got good response and many farmers visited VA to buy culture and get training.

K] Ganesh completed survey of 20 onion farmers for GAP certification.

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

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



**1) Stall in Pabal Yatra -**

DBRT students put up a food stall in Pabal Village fair (Yatra) on 24<sup>th</sup> and 25<sup>th</sup> Feb. Preparation went for a week starting from 17<sup>th</sup> Feb. Intern from TISS- SVE Ms.Swati Komandur helped to carry out market survey and plan for marketing strategy. Team of 8 DBRT students sold lemon sarbat and boiled Channa Chatt. Total sale Rs.1919 and profit earned of Rs.593/-.

11 Students and staff donated blood on the occasion of Pabal yatra.

**2) Facing the drought –** Water situation is very grim and we are surviving on water tanker from Grampanchayat. We have handed over our two cows (Sonal and Sharada) to farmers (Shri.Sampat Thite and Shri. Chaudhary both from Pabal). They have water in their well. They will take care of the cows till July end. Both cow are expecting a calf by that time and farmers will retain the baby.

We have also calculated water availability and possible areas of water savings in kitchen- dish washing areas etc. We are now reusing all water. Students are taking bath under different trees in rotation.

**3) INDUSIA - Solar Cooking Park usage**

Type of solar device	Use Days/ Month	No of Hr/ Month	Remark
Solar Dryer	12	96 Hr	For Pooran poli mix and naval kol powder making
Solar Scheffler	4	8 Hr	For preparing 290 roti. ( Scheffluer still on manual tracking and nearly 10 days were cloudy in FEB)
Prince - 40 cooker	14	45 Hr	For Dal , Rice and curry making.

**Khoa making trial –**

On 18<sup>th</sup> Feb., we conducted trials for making khoa on solar scheffler. In this trial we tried to prepare khoa from 21 lit of milk , but this trial failed due to problem of secondary reflector ( secondary



reflector plats get burned with continuous 3 to 4 hours focusing.) Problem is communicated to Mr.Rahul Kulkarni for replacing these plates.

4) Application for renewal of recognition of welder cum fabricator course is submitted to DVET.

#### 4) Dairy summary

Total expenses in Feb : Rs.9676.2 , Milk collected : 635.9 lits , milk sale : Rs.10612.36, Cow dung sale : Rs.1960. Total margin : Rs.2913.8.

5) **Food Lab** : This month's total sale from Community processing unit : Rs.16500/- and by DBRT students Rs.4814/- . Total : Rs.21314/-

#### 6] Training @ Gossaigaon (Assam)

Sandeep successfully completed electrician training program at Gossaigaon (Assam) from 14<sup>th</sup> Jan – 26<sup>th</sup> Feb. Total 34 students enrolled for the program and 23 got the certificate. As a part training, they did many community service work. They installed 5 street lights, installed inverters, completed wiring. Students earned Rs.4500 during their training. They got order for 200 more street lights from district administration. Students will now complete it as their contract order.



#### 7] New Goat farm & health of goats ( Praj Animal Husbandry project)

*With improved goat farm facility and better control on their feeding, we observed considerable weight gain in our goats. Following is the records of weight gain.*

Goat No.	शेळीचे नाव	जानेवारी महीण्यातील वजन कि. ग्रॅ.	फेब्रुवारी महीण्यातील वजन कि.ग्रॅ.	वाढलेले वजन	% Increase in weight
1	काळी छोटी	28	29	1	3.57
2	काळी मोठी	30	34.5	4.5	15
3	तांबडी पाठ	11	14.5	3.5	31.81
4	पांढरी ×तांबडी	25	26.5	1.5	6
5	पाठ पांढरी	10	13.5	3.5	35

6	काळा वोकुड	6	9	3	50
7	काळी पाठ	5	8	3	60
9	शिंंगला लाल पिवळा	20	21.5	1.5	7.5
10	शिंंगाला पांढरा पेंट	15	16.5	1.5	10
11	शिंंगाला निळा लाल	18	22.5	4.5	25
12	शिंंगाला तांबडा पेंट	5	6.5	1.5	30
15	शिंंगाला काळा पांढरा	28	31	3	10.71
16	छोटे पिल्लु	3	6.5	3.5	116.66

Poultry shed side wall plastering from inside completed. Because of shortage of water, we are going slow with flooring and civil work.

#### Other Tit-bits :

##### 1) Lectures and talks :

i) Anand Gosavi conducted training session on biogas at farmers meeting at Gulanchiwadi(Junnar) on 17<sup>th</sup> Feb. @ 60 farmers attended the training. The program was organized by Jagurti Mahila avam yuvak balkalyan sanstha. They installed 20 biogas with Govt subsidy after the training.

Anand also attended meeting of SRC at IIE on 22<sup>nd</sup> Feb for assessment of JSS program.

ii) Yogesh was invited for interactive discussion on social entrepreneurship at Symbiosis institute, Lavale campus on 16<sup>th</sup> Feb. Students from MIT school of political governance visited VA on 8<sup>th</sup> Feb and interacted with Yogesh.

iii) Director – Field publicity organised a visit of opinion leaders from North east states to Pabal on 3<sup>rd</sup> Feb. Team of Senior management from Cummins visited VA on 10<sup>th</sup> Feb.

iv) In response to our advertisement for various post at VA, we conducted interview on 10<sup>th</sup> and 11<sup>th</sup> Feb at Pabal. We have shortlisted candidates for the vacant positions.

iii) Wheat grinding (floor mill) electric motor was replaced on 17<sup>th</sup> Feb.

##### iv) Environment:

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

Water level in the well: \_\_ meter

Min Temp – 20 degree, Max temp – 34 degree , Humidity – 31 %

ii) Energy consumption: Data not received.

Diesel: \_\_ lits, Electricity (MSEB): units (3 phase), Single phase bill : \_\_ units

Biogas consumption – cow dung used : 1860 kg, biogas produced : 52 m<sup>3</sup>, Biogas used : 31 m<sup>3</sup>

iii) Two wheeler – 295 kms

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

<https://docs.google.com/spreadsheets/cc?key=0An-4RfsZ2K2OdFA0RXVrNm5oUnlvc3pHTXltRDlKeFE&usp=sharing>

**Photo Gallery:**



Poultry feed grinder – Anil with customer



Mr.Kiran Inamdar (HKF) visiting Devalapar IBT stall



IBT Stall at Patharai



String less Jhula



Assam Trainee with SDO Gossaigaon



DBRT workshop activities

Facebook : <https://www.facebook.com/vigyan.ashram.pabal>