

Vigyan Ashram Status Report

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DBRT 2012-13 completed their training

Total 36 Students completed DBRT course on 25th June. 30 Students got internship (17 fabrication, 7 Electrical, 4 Agriculture, 1 Food processing and 1 Marketing), 3 students decided to continue further education. Mr.Chandan Telap stood first in the examination and also own best community service award. He earned Rs.5582/- by community service work. Total amount of earning by community service by DBRT 2012-13 is Rs.61640.00. 14 students completed welder cum fabricator course exam.



This batch is supported by Asha for Education, Tech Mahindra Foundation, Dai

Meghaji, Dnyandeep and many supporters of Vigyan Ashram. We are thankful to them for their support.

Admissions for DBRT 2013-14 has been started. So far 40 students confirmed their admissions. DBRT team was busy in attending students and parents throughout the month.

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)

1) IBT Instructor training programme –

IBT instructor training programme for newly appointed instructors was conducted from 12th to 17th June. Total 17 instructors from 7 schools participated in this training. Fees (Rs.2500 per instructor) for 11 instructors were paid by their respective schools and remaining are sponsored by funding agencies.

2) IBT Newsletter –

With increase in number of IBT schools and multiple partners, it become necessary to have some common bulletin for IBT schools. We have started monthly 'IBT news letter' and first newsletter was posted on 5th July. It will be printed in poster format for schools to display on notice board. It will have information about new community service areas, suggested activities, success stories and IBT news. We are circulating 200 copies to all IBT schools.

3] Yogesh gave presentation in workshop to design 'Learning hubs' under Odisha Girl

Child program organized by IPE Global and Govt of Odisha on 11th & 12th June at Bhubaneswar.

4] Omkar Banait resigned from services for better prospects. He worked with VA for 7 years. We keep on record our appreciation for his work. Ms Adwaita Wartak joined VA as IBT co-ordinator.



INDUSA PTI

1] Nai Talim meeting : Dr.Yogesh Kulkarni and Adwaita Vartak attended meeting of Nali talim curriculum group @ Sevagram, Wardha on 22nd and 23rd June. This group is planning to design 'work activities' for formal schools in line with NCERT syllabus. Next meeting of the group will be hosted by VA at JPNC, Pune.

2] Following OERs are uploaded -- Water Conservation, Water Audit, Solar Dryer and Cooker, Plumbing, Poultry Management, Azolla, Door Lamination

3] Services from INDUSA Lab to village this month – Online admission – 6 nos.

4] Education CDS of Basic and Advanced Workshop, Electrical printed from Pune around 200 copies.

5] Evaluation of Softwares for tablet PCs, did applications like costing, spreadsheet document, quotations for tablet pcs on android based softwares. Designing a course for usage of usage of tablet PCs for users in rural areas.

DST Core support project

1] Aquaponics trial-

After completion of cucumber crop trial under aquaponics polyhouse project, a fresh trial on spinach crop has been started. This trial aims to study effect of aquaponics system of leafy vegetable. For this trial following are the important changes made in system as –

- Drip irrigation system changed to flexible low cost drip lines. These flexible (normally known as pepsi tube drip line of Drip tech make) are having more water discharge / Hr, which will help for better aquaponics filtration.



- Fish tank is cleaned and fish growth is measured before starting new trial. {This is founds that even though fish mortality was very high (@ 70 %), overall fish growth is satisfactory. In an average fish grown by 25gm/ month in 4 months span.} Detailed Report is published on www.vigyanashram.wordpress.com.

2] Solar egg incubator trial –

500 eggs capacity solar egg incubator is attached with solar water heater as per design and a mock trial is conducted 7 days for testing required incubating parameters (appropriate temperature / humidity/ air circulation). After mock trial, live trial with 100 eggs is started from 19th June and expected to finish by 6th July.

3] Ambient temperature trial –

In our exploration of use of different vegetables in the dryer, we tried to use this dryer for onion drying as DBRT project. 9.3kg onion were sliced and put into the dryer. Trial failed as onion shreds turn brown while drying. Total drying time required was 27.30 hr with 93 units of electricity consumption for 9.300 kg of onion. After drying 1.360 Kg of dried onion flex recovered but all flex turned brown color with fungal growth.

4] Praj foundation supported Animal Husbandry project –

Following task has been completed in this month by DBRT students -

- Poultry shed construction- Construction of 100 Ft² internal room, internal flooring and outside plaster work and chain link fixation work is completed by DBRT workshop students.
- Diary shed- Milking parlour shed is fabricated and 1000 lit overhead tank fixed with its plumbing fittings.



5] Water evaporation experiment-

We are exploring methods to reduce loss due to evaporation in farm tank. After preliminary study in the month of May, full scale project on water evaporation study has been started. Student of MIT (USA) Ms Emily along with DBRT students designed the project. Project is designed with 8 water tanks with 2 sets of experiment. First set is with tank covered with plastic bottles and another set is with tank covered with raft made up of bamboo, plastic bottles and cloth (saree's). There are two control tank and two experimental tanks in each set placed in diagonally opposite direction to take care of variation due to wind speed. DBRT students are taking record of evaporation difference and effect on water quality (change in Dissolved Oxygen, pH, TSS, Water EC etc). Tanks for the experiments were made in our workshop. We may have to differ the trial till October due to monsoon.

6] SOW project (Azolla cultivation training) –



Mahesh Lade and Sandeep Jundre conducted a 1-day training programme on Azolla cultivation under the Skill-on-wheel initiative. This training programme was arranged at Chass village in Rajgurunager taluka, and around 30 farmers attended this training. This training was conducted to test new protocols and procedures made for the SOW project.

7] Fodder making Machine –

Following modifications are made in the machine -

- a) Bamboo mat is used as outer cover of sprouting cabin instead of plastic. This will help to maintain required humidity in chamber
- b) Black polythene is fitted in the bottom tray (for last three trays) in cabin for maintaining darkness and enhances germination.
- c) 0.25 Hp motor with on/off timer for running foggers in sprouting chamber.

After these modifications two trials were taken in June on maize sprouting (with the help of students of Dapoli B.Tech college), but both trials failed. Reasons for failure could be low temp inside the sprouting chamber. We are planning to fix heating bulbs for next trial.

DIY Lab activity –

Following are the important projects / activities undertaken in the DIY lab as-

- I. Pradnya Shinde and Suhas Labade attended one-day training with Alpana Tai at *Auto desk* office in Pune. They learned *Auto desk* new software viz 123D Make, 123D Design, 123D Catch
- II. Green manure crops (Denchu and Tag) are planted in agricultural plots at JPNC for increasing organic carbon (OC) in soil.
- III. Mosquito repellent and LDR street light control are made in the DIY lab.
- IV. 5 Students from Prayas (Pune) are coming to lab on every Sunday.

DBRT Highlights

- 1) DBRT students fitted a submersible pump for a customer. They installed the pump in a borewell, installed the starter.
- 2) DBRT students also completed wiring of a new hostel.

- 3) DBRT agriculture section students prepared land using tractor in preparation for monsoon. They sow green gram (Mung), Jawar, Methi, Coriander crop on total of 2 acre area.
- 4) DBRT workshop section students fabricated shed of 12*25 Ft² as private contract from pabal village.
- 5) Students carried out vaccination of 8000 birds on Amol JadaV's poultry farm on 6th June.
- 6) Dairy profit in June is Rs 1421/- , Food product sale : Rs.4065/-



Other Tid-bit –

- I. Ranjeet & Mr.Ashok Kalbag attended hearing at Trade Mark & patent Registration office on 11th June.
- II. Vigyan ashram, Management committee (MC) meeting was held at Vigyan ashram, Pabal on 9th June. Six (6) members attended the meeting and important issues like Development market place proposal, Administrative charges of VA to IIE, progress on DST projects, DBRT budget and fees etc were discussed in meeting.
- III. Sunday Eenadu (Leading daily in Andhra) published special supplement and feature on Vigyan Ashram. We have received lots of response and visits from Andhra.
- IV. Important visitors : 4th June - 20 trainee engineers from GKN sinter metal Pvt. Ltd. 7th June – CSR Pune and Engineering team of Cummins Ltd
- V. Ms Usha Mamdani donated Rs.10000 to Vigyan Ashram.
- VI. Work for development of website of STARs forum is given to Sudio INSPIRA.
- VII. Weather record – rainfall of the month -223.52 mm ,Max temp-27.11°C , Min Temp –22.33°C , Humidity – 77% , Water height in well -
- VIII. Energy consumption record- Electricity unit – Three Phase - 1236 KWH, Single Phase - Diesel consumption for generator- 3.539 Lit.
- IX. Cow milk yield record- Income - 328.25 Lit milk + 720 Kg dung (worth Rs. 6395.44), Expenses – Rs.5256.00.
- X. Biogas consumption – Dung used- 1640 Kg, Gas produced- 47.52 M³.
- XI. Two wheeler – 520 Km, petrol consumption – 12.05 lit (900 Rs.)

Data report for JUNE 13 - <https://docs.google.com/spreadsheet/ccc?key=0An-4RfsZ2K2OdDFPM3hCdHNQLXVCN25ERzI3M3huQWc&usp=sharing>

Photo Gallery



DBRT Students and MIT volunteer conducting - Water evaporation experiment



DBRT Students fixing chain link in newly constructed poultry shed.



DBRT Agriculture students - seed sowing



Solar Egg incubator live trial with 100 eggs



IBT Instructor training in Home & Health section



LDR installation at DIY Lab, Pune.