

# Vigyan Ashram Status Report

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### A] Agrowon Agriculture Expo 2014 Exhibition

DBRT students participated in Agrowon Agri Exhibition-2014 from 14<sup>th</sup> to 18<sup>th</sup> Nov at Agricultural college ground, Pune. We have displayed newly developed Hand operated Rice De-husking machine, Poultry egg incubator, various new food products. We have got good response from visiting farmers. This also give good exposure to team of DBRT students. Agrowon paper published information on our product on 15th November.



### B] Poultry Training

On the request of M/S Sahyadri Industries a special Poultry training was conducted on 22<sup>nd</sup> 23<sup>rd</sup> Nov for their marketing executives (Area managers). Sahyadri Industries has launched cement board poultry cages under brand name of Kukadu-Kuu. They wanted to give orientation to their newly appointed marketing executives. Total 12 marketing executives from Maharashtra, Karnataka, Andra Pradesh, Tamilnadu , Chhattisgarh, Rajasthan and Madhya Pradesh attended training at VA campus.



### C] IBT Instructors Training

We have conducted two IBT teachers training program simultaneously at different location. Now we have two teams of trainers for conducting training.

a) @ Pabal : Training program for newly appointed instructors was organised from 1<sup>st</sup> – 5<sup>th</sup> Nov. Total 29 instructors from Maharashtra, Madhya Pradesh and Karnataka participated in the program. Design thinking methodology was introduced to them for implementing L1- new IBT syllabus. This training was lead by Sachin and Kailash.

b) @ Dantewada and Bijapur (Chattisgarh) : IBT program is progressing well in Chattisgarh. Refresher training was conducted for IBT instructors in Dantewada (47 instructors) and Bijapur (36 instructors) from 1st to 8th November. Training was led by Ranjeet, Rajshekhar and Ganesh.



IBT Instructors team@ Bijapur-Dantewada (CG State)



New instructor Training @ Pabal

#### D] Technology Development

Our advisor Dr.Arun Dixit stayed on campus for a week and helped us in defining new technology development project objectives. Following experiments are finalized and started with DBRT students.



##### 1) Experiment on High density fish farming

- Work on establishing high density fish farming experiment is started. This experimental study will help us in establishing feasibility of aquaponics system. In earlier aquaponics trials fish were not grown well with limited nitrification cycle. So far we have completed study of reference literature.

The objectives of study is –

- To study RAS (Recirculation aquaculture system) systems and establish working demonstration model at VA campus.
- To study techno-economical feasibility of high density fish farming.
- To document technical parameters required for of high density fish farming.

More emphasis will be given on water quality , bio-filtration functioning, fish growth, fish feeding etc during this experiment.

**2) Solar cooking experiment** – We have started use of solar park with clear sun shine and required day temperature rise. Trials were conducted to compare cost of cooking in solar cooking Vs traditional



cooking methods. The experiments conducted for cooking daily rice (VA kitchen), roasting peanuts, making tomato sauce, and making of milk khoa. The experiment showed that PRINCE-40 and Scheffler can be used for making of Tomato sauce, Khoa and roasted peanuts with energy cost saving of Rs.25.00 , Rs.80.00 and Rs.7.22 / kg respectively. But time requirement for preparing tomato sauce and khoa is considerably high, which can be reduced by preparing self agitating vessel.

3) A trial is taken to make 'Annar Dana' using Anupama hydraulic press. Details of the trials are as follows :

Pomegranate : 3.12 kg → Seeds (1.87 kg) + Peels and waste (1.25 kg)

Pomegranate Seeds (1.87 kg) → 1.07 lit juice + 420 gms of dried seeds

These dried seeds can be made into 'Annar Dana'. We are exploring business potential of using press for selling juice and making Annar dana.

### E) Kitchen Construction Update

i) Brick work for wall has started. It was found that cost of light weight blocks (Cement + foam material) made by C'cure Eco company are cheaper than ferrocement construction. Hence we purchased 682 blocks (Size 600 \* 240 \* 125). Manufacturer gave training to DBRT students on use of solution in laying bricks. Students are now constructing wall.

ii) We have also fabricated doors in workshop. Cost of each door is Rs.4700/-

ii) We made a machine to cut brick block to required length. We used old ply cutter m/c from scrap. Its cutting wheel is replaced with pipe cutter wheel and 1 hp motor is used. This machine helped in cutting cement blocks.



**F) INDUSAPTI Content Development :** Following lessons are finalized and uploaded on [www.learningwhiledoing.in](http://www.learningwhiledoing.in)

- i) Accounts ii) Bamboo Truss iii) Engineering Drawing iv) Survey Technique v) Electrical services – pump, motor & Inverter repair vi) Electric wiring (Marathi) vii) Energy audit (Marathi) viii) Jam preparation (Video)

ii) Shikshan Pandhari Project : Following activities are conducted using OERs in following schools.

a) Sitaram Maharaj High school, Khardi, Pandharpur → (27<sup>th</sup> and 28<sup>th</sup> Nov) Conducting energy audit

b) Darling Vidyamandir, Chale, Pandharpur -→ (25<sup>th</sup> and 26<sup>th</sup> Nov) Electric wiring

iii) A reporting format for recording feedback of students in Shikshan Pandhari project is developed with the help of Maharashtra knowledge Foundation team.



### G] DBRT Update

i) Food processing : Following products were made by DBRT students :- Amala processing - 33 kg, Biscuit - 5kg , Groundnut chikki - 2 kg , Sesame chikki - 2 kg, tomatoes processing - 20 kg  
Total value of community service from Food section in Nov 2014 is Rs.11596/-

Following research projects are in progress : - Wheat flour biscuits, Moringa leaves powder biscuits , Raddish pickle



ii) Agriculture & Animal Husbandry : DBRT students visited Dairy farm of Mr. Anna Chowdhary on 7<sup>th</sup> Nov to study their operations.

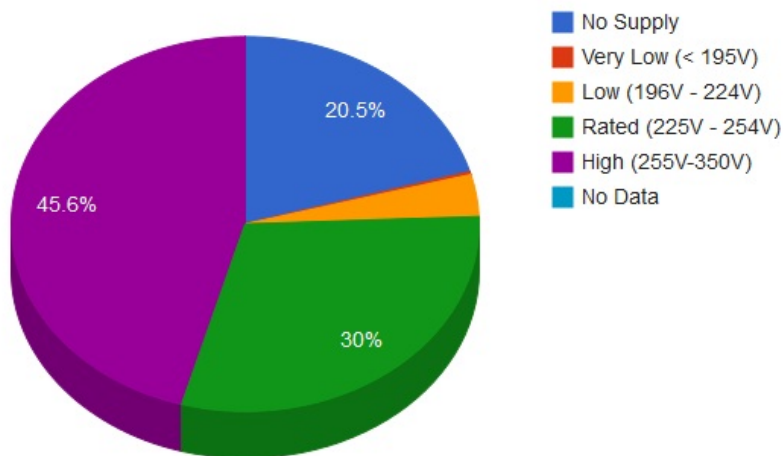
lii) DBRT students are working on a hydroponic project. They have produced 3.4kg fodder from 500gm seeds in 7 days. The project is in progress. Students also sow 1kg lasurn seeds in agri plot. Also spread vermincompost in agri land. Carried out Urea treatment for jawar crop in the field.

iv) Artificial Insemination of Gauri and Sonam cow was done this month. Dairy : Gauri : 254 lits, Soni : 68 lits, Sonam : 68 lits: This month's dairy surplus is Rs.1624/- .

v) Goat farming : Buck service : 11 nos, Goat farming is in loss of Rs.1288/-

vi) Evening snacks has been started for students from 20<sup>th</sup> Nov. It is prepared by food lab. Rice and ingredients are supplied by kitchen.

vii) Mr.Suyog Wargade joined as Energy-Environment instructor from 16<sup>th</sup> Nov. Mr.Vishal Jagtap has been given responsibility as co-ordinator of the DBRT program.



vii) We have installed 'Watch your project' gadget on 9<sup>th</sup> Nov. It is received from Prayas, Pune. It will record quality of electricity and transmit it to website

<http://www.watchyourpower.org>

We have 87 electricity interruption this month with total duration of 145hrs, 3min. Quality of electricity throughout the month is graphically shown in the fig.

#### IBT updates :

- i) RMSA and DVET (Govt of Maharashtra) organized one day orientation workshop on vocationalisation of secondary school at Yashada on 29<sup>th</sup> Nov. Yogesh and Mr.Ashok Kalbag attended the meeting. We also display information about IBT at the venue. Yogesh participated in the panel discussion.
- ii) Amkhel School made cart for procession : Rs.4000/- , Shanimandal school repaired 3 napsack pump and repaired borewell flange (welding): Rs.200/-
- iii) Ranjeet visited Balrampur (Chattisgarh) on 12<sup>th</sup> Nov. He finalized MOU with Livelihood college and District administration during this visit. It is decided that district administration will identify youth and send them to Pabal for DBRT training.
- iv) Whats app Group : IBT Family : Number **9975752916** is started. This is a platform for IBT School Principal, Coordinator and Instructors. This will be used to provide important information, content and reporting activities in the schools.
- v) Farzana visited all candidate schools for model IBT project. She is helping them to make a proposal for Praj Foundation.
- vi) We are working on developing Android based application for IBT reporting. This is from onTAP application. We can use android phone to upload data from IBT schools such as community services, photo's, infrastructure details, practicals etc. We are testing the application with 3 users using Akaash tab and android phone.

### M] D-I-Y Lab

Two projects made in D-I-Y Lab won 1<sup>st</sup> and 2<sup>nd</sup> prize in Inter school Science project competition organized by Mahesh Vidyalaya.



Mohit Patil High School – Rain water harvesting 1<sup>st</sup> Prize



City Internation – 2<sup>nd</sup> Prize – Model of Hydroponic

### N] LED light project in MP and CG

i) Training program on solar and LED lighting was conducted @ Livelihood college, Balrampur. Total 24 trainees participated in the program. Collector, CREDA engineer, CSSDM head & PMRDF visited during the training. Students also learned marketing of lights in weekly Bazaar and sold 18 lamps.

ii) No of Lamps Sold this month : 405

iii) Solar Village done this month : Badi Chohaji

### O] Other tit-bit –

1) Members of Soham Ganesh Kusum Samuh donated Rs.50,000 to DBRT course on 29<sup>th</sup> Nov 2014

2) Weather record – rainfall of the month - 26 mm ,Max temp- 36<sup>o</sup>C , Min Temp –23<sup>o</sup>C, Humidity – 85% , Water height in well – 8.35 mtr

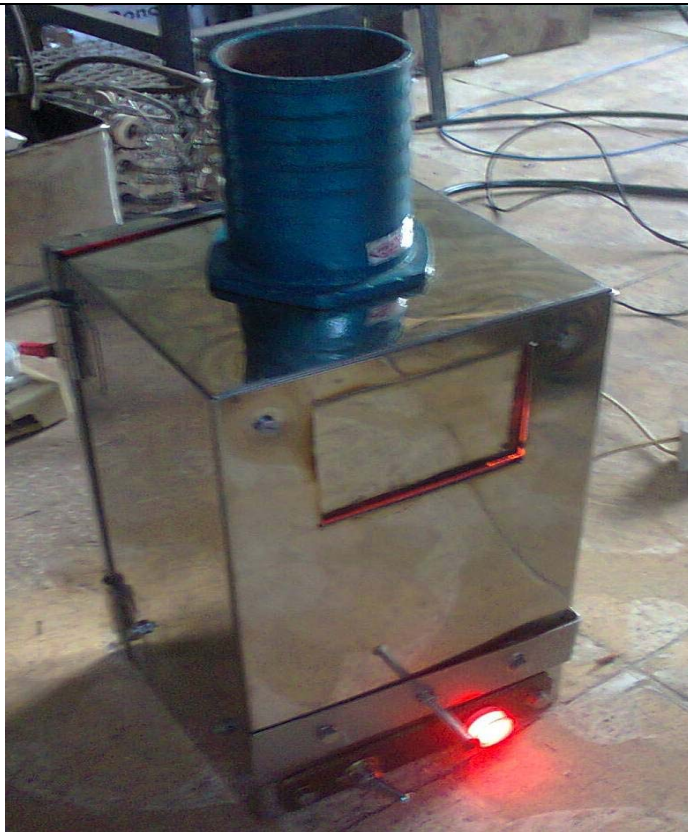
3) Energy consumption record- Electricity unit – Three Phase -807 KWH, Single Phase – 126 KWH, Diesel consumption for generator- 0

4) Biogas consumption – Dung used- 1150 Kg, Gas produced- 33 m3.

### Data Sheets :

<https://drive.google.com/file/d/0B3-4RfsZ2K2OdINNaGo3X2JfdIU/view>

**Photo Gallery :**



Incinerator : Prototype under testing. So far 55 sanitary napkin were burned.

**Mahanarmada Bakery**

**Whole Wheat Biscuit**

With extra Fibers & added Nutrients

**Ingredients:**  
Cashew nuts, Milk, Butter, Cardamom, Linseed, Omega Seeds, Baking Powder, Whole Wheat flour, No added artificial Colour, Flavour & Preservatives

**Manufactured by :**  
Community Food Processing Unit  
Vigyan Ashram, Pabal  
Tal : Shirur, Dist : Pune 412403  
☎ : 02138 292326

**Web :** www.vigyanashram.com  
**Supported by :**  
Department of Science & Technology(New Delhi) & Praj Foundation (Pune)

**Vigyan Ashram Associated Company**

Net Content :  
Batch No. :  
Mfg Date :  
MRP :

Best before 2 Months from the date of manufacture

New

product developed in Food Lab



DBRT students repairing floor mill



Fixing solar water heater

**हस्तचलित तांदूळ सोलपी यंत्र**  
 वीरम अश्रम

तांदूळ महाराष्ट्रची पहिली गुरु, पंतु कारकीर्दीचे प्रेरणा स्रोत. शास्त्रादीन्य तांदूळसोलीय यंत्रिका गुणवत्तुने मर्यापी काढणे. सवक (वि. १५) येथील शिक्षण आश्रमकेंद्र हस्तचलित तांदूळ सोलपी यंत्र प्रदर्शना सादर केले आहे. त्याची किंमत दहा हजार रुपये आहे. या यंत्राकडे तांदूळसोलीकरण तांदूळ भाजणे मिळते. केवळ ४ इन्चोसमवेत लांबावा ८० टक्के तांदूळ ४ गुणवत्ता मिळे. मिळवणीचे वेळ साधारणतः जून-सप्टेंबर महिन्यात होतो. तांदूळसोली यंत्र उद्योगाकडून मिळवणे किंवा स्वतःच तयार करणे. तांदूळसोली यंत्र उद्योगाकडून मिळवणे किंवा स्वतःच तयार करणे. तांदूळसोली यंत्र उद्योगाकडून मिळवणे किंवा स्वतःच तयार करणे.

हस्तचलित तांदूळसोलीय यंत्र



अग्रोवन कृषी

Agrowon news



Carrying out piping job



Instructors Training At Pabal



DBRT students visit to dairy farm



Despatch of 100 eggs incubator. With its owner



Objects printed using 3 D printer at VA

For regular update @ VA activities please like : [www.facebook.com/vigyan.ashram.pabal](http://www.facebook.com/vigyan.ashram.pabal)