

Vigyan Ashram Status Report

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In this issue

- Visit to Sher-a-Bangla Agriculture University, Dhaka
- Fabricademy course started from 25th Sept
- Experiment for root cause analysis of heavy fish mortality
- Innovation Lab, Palnar activities has started

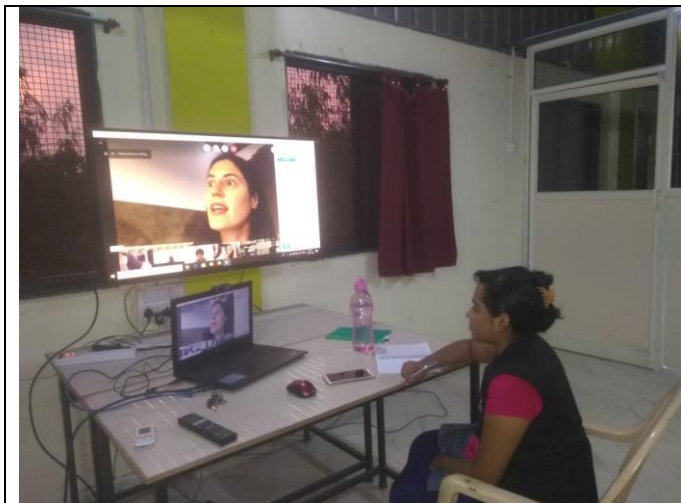
A] Visit to Sher-a-Bangla Agriculture University, Dhaka

Dr.Yogesh Kulkarni was invited as a Chief guest for the inauguration of Fab Lab at Sher-a-Bangla University, Dhaka, Bangladesh (Fab Lab-SAU) on 16th and 17th Sept. Yogesh gave a talk on 'Fab Labs for developing Appropriate Technologies'. VA alumni Mr.Amanuel Arefin joined Fab Lab-SAU as a Manager. Arefin was given Fab Academy certificate on the occasion. Yogesh also interacted with Fab Lab team about future project ideas. He also visited Fab Lab, Dhaka on 17th Sept.



B] Fabricademy course : Vigyan Ashram joined Fabricademy (<https://textile-academy.org/>). This course is about textile and run on the lines of Fab Academy. Ms Harshada Raut is taking Fabricademy

from Vigyan ashram. She got a scholarship for the course from Zios Makerspace and Dassault system. Fabricademy is a transdisciplinary course that focuses on development of new technologies in textile industries,



wearable electronics, bio dyes and bio fabrics. We hope to learn from global labs and introduce new skills in Vigyan ashram's program. Assignments of Harshada will be available on : <http://class.textile-academy.org/2019/harshada.raut/>

C] Technology Development

i] Soil Health Card mission 2018-19: During September, we have completed testing of 2494 soil samples and online data entry for 3365 farmers from 10 villages. We will be starting printing and distribution of health cards to farmers from October.

ii] Composting trials @ Khairewadi village – As a part of Soil improvement work, composting experiment started with 5 farmers in Khairewadi village. Under this experiment, bed prepared from mung straw (usually burned by farmers) with cow dung slurry on the field of 2 farmers (control plot), whereas 3 composting beds were prepared by using special composting culture and Jivamrut. We will compare results of both the composting process.



iii] Fish experiment – From 22nd Sept to 29th September experiment was conducted with the aim of ‘Standardizing initial stocking density & treatment methodology for Vietnamese koi (Anabas testudineus)’ fish. The experiment was done to do ‘root cause analysis’ after heavy mortality of koi fish fry’s during last month. A detailed ‘design of experiment’ (DOE) was done from this experiment and trial conducted with full factorial design with 3 variables & 2 replications. (8 sets with 2 replication and 2 middle point).



Experiment was conducted by placing fish in 20 separate buckets with 10 lit water and 3 treatments as treatment with antibiotic (oxytetracycline) & Copper sulphate (CuSo₄), feeding @ 7 % & 20 % of body weight and fish density (1 gm/500ml, 1gm/125ml and 1gm/250ml).

Experiment showed that fish density of 1gm/ 500ml with 20 % feeding rate and treatment had maximum survival rate as compare to other two treatments. It is also concluded from this experiment that higher density leads to higher stress levels. This leads to fin & tail rot disease

infection. It was the main reason for very heavy mortality during August & July.

D] DBRT Progress:

Agriculture :

i) Poultry farm update – Number of eggs – 1880 Egg , Kg of feed used – 336 Kg (FCR – 2.14 / dozen of eggs) , Mortality – 1

ii) DBRT Agri students planted chilli crop on 4 gunta area. They have also planted Papaya seedlings as a intercrop in chilli plot.

iii) DBRT student Rohan harvested 46.5 Kg of marigold flowers, 160 rose flowers from & 7 Kg's of green moringa leaves from polyhouse. He had dried moringa leaves (Dry weight: 400 gm)

Engineering:

iv) Students made 15 RCC cement poles as part of their practical's. It is used to erect fence around the new hostel.

v) Kabir made coconut husk removing machine against order from Mr.Mehar.

vi) Students projects in progress are:

→ Scrap yard : It will be place for stocking scrap in segregated way.

→ Wash basin for common kitchen.

vii) As a part of lathe machine practical, students made 10 round sticks for playing Barchi dance.

Energy

viii) Students learn motor rewinding and did rewinding of 20hp motor of Kanersar Grampanchayat.

ix) Students did electrical decoration for Ganesh festival.

Others

x) Project Management training was conducted by PMI Educational foundation on 2nd Sept. Topics covers were Project activity breakdown,



DBRT students sowing seeds



Project Management Workshop

constraints, cost & schedule, communication with stakeholder and risk management. It was activity-based training and will be useful for students in their own project management.

xi) Computer center : DBRT students started writing blog of their project work. Seven girls of Super 20 course are doing data entry work for preparing Soil health cards of farmers. Ms Komal sambhudas scanned 12 books in this month for Wiki Source.

E] Entrepreneurship Accelerator

- SOW project update – Ranajeet visited Pasli on 1 & 2nd September for baseline survey & selection of beneficiaries under SOW project. He also visited Mr.Kailash Shinde in Nigade village. Kailash had started his small 100 bird poultry farm in Feb 2017, now it is expanded to 2000 birds capacity. He is doing very well in his business and there is no poultry in 50 Km of his vicinity.



@ Kailash's poultry farm

F] IBT News :

Examples of Chattisgarh IBT activities :

- a) Mendoli IBT students prepared land for agriculture and sow vegetables seeds on 20th Sept.
- b) Students of Naimed IBT program prepared different items from Fur cloths.
- c) Students of Karli porta cabin school made dustbin from scrap and students of Gumada school made soak pit in school.

d) Innovation Lab, Palnar :

Suyog visited Palnar lab from 4th – 8th Sept and conducted activity of making Solar study lamp. Total 73 students from Girls high school & Boys High School, Palnar and Porta cabin High school Kuwakonda participated in the training. Team from Innovation lab repeated this activity in two other schools.



Innovation Lab, Palnar

d) Vishal attended Maharashtra Open School book review meeting on Multi Skills Foundation Course (MSFC) 8th std on 28th and 29th Sept at SSC board.

e) We are starting IBT program in Padsare high school. A baseline study was done on 4th Sept by Ms Tejal Mahashabde. Installation of IBT setup & machine installation was done in the Padasare School with the help of local instructors was done from 11 Sept.to 16 Sept. 2018.

f) Sachin visited Tamilnadu IBT program from 4th – 7th Sept and take review of IBT activities.

g) Following lectures using video conferencing were conducted in Sept 2018.

Sr. No.	Date	Subject	Lecturer Name	No. of Schools participated	No. of students and instructors benefited
1	1.9.18	Earthing	Dr. Yogesh Kulkarni	19	800
2	8.9.18	Dehydration- identifying causes and treating dehydration	Mr. Ranajeet Shanbhag	19	814
3	15.9.18	Blood group testing	Mr. Ranajeet Shanbhag	19	720
4	22.9.18	Hemoglobin Checking	Mr. Ranajeet Shanbhag	16	634
5	29.9.18	Personal health behaviors and factors affecting personal health	Mr. Ranajeet Shanbhag	19	901

G] DIY Lab : Following workshop were conducted in the month of Sept 2018.

- i) Workshop of “Ganapati decoration using Arduino & sensor” was on 1st and 2nd Sept2018 for 7 students.
- ii) Conducted 3D Designing Workshop at ‘Samarth high school, Chimbali Phata’ on 14TH



Sept (15 students); “Swami Vivekanand Vidyalaya School IBT school Asade” at on 7 Sept (15 students).

- iii) Conducted electronics workshop in PMC schools - “Savitribai Phule high School Bhavani Peth” on 18th & 19th Sept (20 Student), “Sant Namdev Vidyalay Maharshi nagar” on 25th & 26th Sept (20 Student).

Other Tid-Bits :

- i) Students celebrated Ganesh festival in the hostel. They also performed Barchhi dance during Ganesh procession. They earned Rs.14500/- by performance. After deducting all the expenses, they saved Rs.4300 for picnic.
- ii) Fab camp for 18 students from Symbiosis college, Pune was organized on 25th and 26th September 2018.
- iii) Ajay kumar garg College of engineering(AKGEC) Director Dr.Agarwal and Dr. Ashiv shaha visited Vigyan ashram campus on 24th September 2018.
- iv) Ranajeet attended meeting of Project Management Institute (PMIEF) (Pune-Deccan) chapter on 28th Sept.
- v) Yogesh visited Dimapur(Nagaland) from 24th – 28th Sept to attend Expert committee meeting of tribal sub plan project review meeting of DST. He also visited Khatkhathi vocational training center of Vivekanad Kendra on 28th Sept.
- vi) Donation : We are thankful to Dr.Rajendra Agarwal, Ms Yogashree Manganuri for their donation to VA’s program.
- vii) Vigyan Ashram has send one dome kit (7 mtr dia) and one water filter to Kerala fab lab for helping Kerala flood affected victims.
- viii) Visitors to Pabal campus – 188; www.dsttara.org – 827(New-728 , Repeated-97), www.vigyanashram.com -1071 (New visitor – 811 Repeated-260) ,www.vigyanashram.wordpress.com – 1426(Visitor-906 Viewers- 520)
- ix) Weather record – Rainfall – 32 mm (Total 316 mm) ,Max temp- 34 °C, Min Temp – 20°C , Humidity – 74 % , Water height in well – 6.7 mtr.
- x) Energy consumption record- Electricity unit – III Phase- 1225 unit, I Phase- 895 unit. Quality of power: Number of interruptions: 47, No power: 1.5 hrs. Normal voltage: 94 % , Low voltage : 4.2 % , No supply : 1 % , No data : 14%
- xi) Two wheeler usage : 889 kms
- xi) Biogas consumption – Dung used- 151 kg, Gas produced- 1.36 m³ (under maintenance)

Data Report : https://drive.google.com/open?id=1sr_QHv8_b-6BGHI6mS8Y0bGGdrZ6g6hO

For Regular update: www.facebook.com/vigyan.ashram.pabal

Our sites : www.learningwhiledoing.in , www.dsttara.in , www.vigyanashram.wordpress.com , www.vadic.wordpress.com , <https://ruralstartup.wordpress.com/>

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Photo Gallery :



Ganesh visarjan in drum



Electric motor rewinding



Rice plantation at Tilali High school



Super 20 Girls @ computer class



Solar study lamp :Innovation lab Palnar



Fab camp for SIBM students.