

Vigyan Ashram Status Report

Volume 31 Issue 4

April 2013

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India Development Marketplace(IDM) 2013

Vigyan Ashram participated in IDM 2013 with two proposals. IDM was organized by World Bank and they wanted to provide support to already proven models for further scaling up. Out of 192



VA team with IDM trophy at our stall @ IDM, Bhopal

proposals received by world bank, 30 proposals were shortlisted for final round. Our both the proposals got selected for final round. IFC and world bank team visited VA on 8th and 9th April for site visit and due diligence. Final round was in Bhopal from 29th April – 1st May and our proposal of 'Solar and human power based - hybrid lighting solutions' got selected for award of \$ 100,000.

The proposal is made in collaboration with 'Bottom of the pyramid energy and environmental solutions Pvt Ltd.'. We plan to train and establishing 300 energy entrepreneurs in Chattisgarh and MP. We also plan to install 100 demonstration unit in schools in MP and Chattisgarh.

IBT Instructors training

Training program for HKF supported schools was organised from 16th to 22nd April 2013 at Devalapar. Total 33 Instructors attended the training. Instructors also visited 'गो विज्ञान अनुसंधान केंद्र' and learn different products from cow dung and cow urine. Whole emphasis of the training was to train instructors in locating productive work – task in the school which will cover essential practical's.



Sea sow made during training.



Basic Skill Training for students from Drought prone area

Aapanach and Netaji Subhashchandra Military school organised a camp for 200 students from drought prone villages in Marathwada at fulgaon. VA conducted training on basic skills & technologies at Pabal from 24th April – 8th May. Students came to VA in batches of 40 students every day.

Solar lights installation Training at Wardha

Anand and Sandeep conducted training on solar installation and maintenance from (28th April to 5th May) at Selu (Wardha). Training was organised by MCED and Urja future. On this occasion MCED, released booklet on solar installation written by Pawan Bhise and Yogesh Kulkarni.

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)

HM Meeting –

Annual meeting of school principals from HKF foundation supported schools was held on 15th April. We have discussed preparation for next academic year and also gave school wise feedback to each school. We also agreed for the action items during the summer holidays.

ii) A survey of schools in Tadoba buffer zone was done. Since many schools in tribal area's do not have adequate building and workshop in place. It is decided to start the program without Govt

sanction and develop the infrastructure in the process. Madanapur school selected instructors for training and will start IBT from next academic year.

iii) Team of HM and teachers from Jnan prabodini high school, Harali (Osmanabad) visited ashram for preparation of starting IBT program on 26th April 13,

iv) Omkar checked proof of 10th std IBT books at SSC board office on 26th and 27th April 2013 .

v) Laxmi and Mina from Dantewada is undergoing IBT field office training at Pabal.



HM meeting at Devalapar

DST Core Support Projects:

1) Aquaponics Project-

Aquaponics trial is in progress. Following results are achieved so far.

Experimental (Aquaponic)	Control Plot
167kg yield of cucumber	125kg of cucumber
Boron deficiency symptom on 18 fruits	Boron deficiency symptom on 44 fruits
No fungal disease on roots so far.	6 plants died due to root rot.

Mean while because of heavy pest & diseases attack we started use of in-organic chemical control measures. Major challenges are due to hot summer (43 °C) flower's are following down, serious water shortage, high pest attack and fish mortality (10 fish died on 25th April). To control temperature we installed foggers in the polyhouse.

2) Fodder making Machine –

Based on learning from previous trials, we have modified fodder making machine. Following modifications are done:-

i) Fogger system is placed for even distribution of water ii) Artificial light source (18 W CFL) is used @ 12 day iii) Seed are placed by calculation of 500 gm / sq ft.

Trial was conducted for 13 days and average temp of 31 °C and humidity of 77% was maintained throughout trial period. At the end of trial (on 13th day) weight gain of 4.76 times (750 gm seed grown into 3560 gm green fodder) was recorded. Similarly around 105 gm seed were found non-germinated , so if we take these non germinated seed in account then weight gain was 5.52 times (750 – 105 = 645 gm seed grown in to 3560 gm fodder). The results are as per set objective of project but it took 3 additional days than estimated. We will work to achieve 5 times weight gain in 10 days with maximum seed germination. Details are on www.vigyanashram.wordpress.com .

3) Farmers Club-

i) Azolla training – Under Kamdhenu Scheme of Animal Husbandry dept, ten farmers from Inadapur and AH officials underwent Azolla cultivation training on 9th April.

ii) Ranjeet facilitated meeting with Sonai Agro Pvt Ltd and Padmatech Pvt Ltd for preparing their project report for NABARD. Padmatech Pvt Ltd is consultancy firm working in food processing with specialty in dehydration products. It is decided that Padmatech will act as official consultant for Sonai Agro and do all required follow up with NABARD.

iii) Ranjeet is also helping Nobel21 in connecting them with farmer group and sourcing vegetables. Nobel21 setup their fresh vegetable retails outlet @ Solaris, Kalyani nagar, Pune.

4) Dryer Projects –

i) Tomato powder trial – In process of developing business models around solar gadgets, we tried tomato drying with solar dryer. 5 Kg of tomatoes are dried. With 12 hr of drying, 230 gm powder was obtained with recovery of 4.6 %.

ii) Ambient temperature Dryer – Our work on development of dryer is in progress. We have made changes in such a way that air will move diagonally inside the dryer. Trials were conducted with Neem leaves. Results are as follows :-

Product name	Initial Wt	Final Wt	Cooling Chamber Max / Min Temp	Drying Chamber Max Temp / Humidity %	Total run Hr	Electricity Unit Used	Wt Loss (% water removed)
Neem Leaves	4.920 kg	2.220 kg	13° C & - 2° C	10% & 53%	32	34 unit	2.700 (55%)

After 32 Hr , Neem leaves are dried with 55 % water lose (4.8 % water remained). It is found that leaves in all section (all trays) dried properly (this means air flow is well maintained).

5) Praj Animal Husbandry Proposal-

i) Plastering of poultry side wall is completed. The work is done by DBRT students with the help of 1 skilled labour from outside.

ii) Dairy shed – Partition for individual cow’s were fabricated by DBRT students.

6) Solar Egg Incubator work – Anil Gadhe has started modification for developing 500 egg incubators. Presently he is working on improving insulation and internal piping system of incubation box.

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



Sketch of Solar egg incubator system

D-I-Y Lab Progress

D-I-Y lab setup is completed with new furniture, tools & equipments. A first summer camp for 7th - 10th standard students was held from 21st april-4th May, 12 students participated in the camp. We conducted activities on Electrical, electronic, mechanical, agriculture, bamboo decoration and chemistry. Various demonstration models are made and kept for display. We expect the lab will become fully functional before beginning of next academic year.



SOW project

- i) Two days workshop of students from Himmatgram (Snehalaya) was conducted at Pabal on 2nd and 3rd April at Pabal. We are planning to work with these students to start livelihood activities at Himamtgram. Our trainer will visit regularly for mentoring and follow up.
- ii) Swati and Mahesh are working on developing protocol for SOW training.

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

- 1) On 22nd April, Dr.Ashish conducted session on addiction and sex education with DBRT students.
- 2) DBRT, 3rd section examination was held on 3rd and 4th April.
- 3) Welder students fabricated railing for staff quarter stairs as a project work.
- 4) One day workshop for Amrutyatra students (7) were held by DBRT team.

5) Dairy summary

Total expenses in April : Rs.7020 , Milk collected : 576 lits , milk sale : Rs.9735/- Cow dung sale : Rs.1267. Total margin : Rs.3982/-.

Sanen goat delivered he goat on 12th April.

6) Food Lab : This month total sale from Community processing unit : Rs.6813/-. Highlights are : food lab completed order of 7kg pooran mix, Jelly of 30 wood apple and drying of 45kg tomato.

7) INDUSAPTI

- i) DBRT students completed wiring of the computer lab.
- ii) Pankaj attended OER development workshop organised by MKCL from 2nd – 4th April.
- iii) OER on water audit and water conservation were complete.
- iv) Pankaj also did comparison for various software's available for accounting viz. Tally, GNUCASH, OpenERP, Marg 3.2 etc.



Other Tit-bits :

- i) Dr.Nilam (Deshpande foundation) visited VA along with Mrs.Bhalerao (LAHI) on 15th April.
- ii) We purchased pine wood scrap (Export packaging) material for making door and windows of new hostels. The work has started.
- iii) Anand was a chief guest at alumni meet of Vinzar high school on 2th April.
- iv) Yogesh visited Madhya Pradesh Vigyan Sabha and Masum during his visit to Bhopal for DM competition.
- v) Important Visitors to VA - Lokpanchayat Sanstha – Sangamner (15), Ashish Bhave – Assam (5) Investment In Man Trust, – Fulgaon – 8 Person , Greenpeace Foundation – Dhule – Ranjeetraje Bhosale, Amrut Yatra (7)Person , Sahyadri School(Rajgurunagar), Mr. Ashok Mathur & Mr. Nadkarni – Pune 2 Person

iv) Environment:

i) Rainfall of the month: -- mm

Min Temp – 27 degree, Max temp – 32 degree, Humidity – 17 %

Water level in the well: __ meter

ii) Energy consumption: Electricity (MSEB): Three phase units: 731Kwh, Single phase units: 479 Kwh

iii) Biogas consumption – cow dung used: 996 kg, biogas produced: 40.44m³, Biogas used: 24.84m³

iv) Solar Scheffler use_(INDUSA facility): 40:58 hrs & 1838 chapattis. PRINCE40 is used everyday for rice and vegetable in the afternoon and for making dal for evening dinner.

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

<https://docs.google.com/spreadsheet/ccc?key=0An-4RfsZ2K2OdHV2aUY0RkJHUVpieXAzbEtCX2gxUGc&usp=sharing>

For regular updates : <https://www.facebook.com/vigyan.ashram.pabal>

Photo Gallery:



DBRT examination in progress

Ambient temperature Dryer

