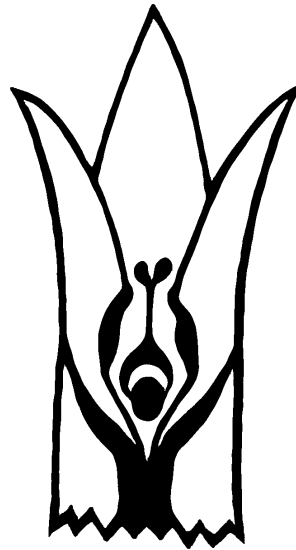


ANNUAL CENTER ACTIVITY REPORT

2009 - 2010



VIGYAN ASHRAM

AT.POST.PABAL DIST.PUNE 412403
(A CENTER OF INDIAN INSTITUTE OF EDUCATION)
128/2, J.P NAIK PATH, KARVE ROAD, KOTHRUD
PUNE 411038, PH : 020-25424580

WWW.VIGYANASHRAM.COM

Progress Highlights:

A) Diploma in Basic Rural Technology (DBRT) Course

(Supported by ASHA for education – seattle chapter, Lend-A-Hand India, Mr. Dai Meghaji, and Honey well)

- 1) DBRT 2008-09 Batch completed their training on 25th June. They have done many remarkable projects in one year' s time. Project includes construction of one Guest Rooms, Benches for class room, Medicinal Plant Nursery, Polyhouses. They also participated in Farm tank construction etc. ASHA for education provided support for teacher' s salary and utility expenses. Total 32 students enrolled for the course. 27 completed the course and 19 got placement for apprenticeship. 5 students choose to continue in agriculture & 3 students opted for the further education.
- 2) DBRT batch 09-10 started with 36 students. 7 students came from UP, 2 from Gujarat, 3 from Vidarbha and rest from different parts of Maharashtra.
- 3) Mr Diamond Meghaji (E-Boss), Honeywell & Lend a hand India, supported loan scholarship for DBRT students.
- 4) Total value of community service given by DBRT students is : 70000/-

Following courses conducted during the year 2009-2010 at Pabal.

Name of Course	Number of Students
DBRT	32
Poultry	21
Green House Technician	10
Welder cum Fabricator	24
Tally	3
MS Office	12
Computer Tech Program	4
ELECRTICAL & Motor winding	9
Food processing	2
TOTAL STUDENTS	117

B) PLAN 100 Program

Plan 100 is a joint project of Vigyan ashram and Lend-a-hand-India to take IBT to 100 schools. We are working closely with Lend-a-hand-India team to accomplish this mission

1. This year students from 21 Schools appear for IBT – Xth standard examination. Total **800** students appeared for IBT exam and passing result is 100%. Total number of students enrolled in IBT from VIII – Xth std are 4879.
2. A website is developed to monitor IBT program. Now all information about School, Instructors, IBT Status, Students enrollment, community service, practical' s done at schools, village information , funds disbursements etc. is available on www.lahi-impact.org.
3. The range of community service includes electrical wiring, nursery, food products, fabrication works, manufacturing of LED lamps, construction work, soil and water test , repairing electrical appliances etc. Total value of community service given by schools is Rs. 783219/- Total Fees collected → 869744/-
4. Quarterly progress review meeting between Vigyan Ashram and LAHI were held on April16, 2009, Aug 1, 2009, October 18, 2009 and January 28, 2010.
5. List of school participated in the program as follows –

Kalamb	86	Hasur Kh.	100	Banda	25	Chikhalgaon	164
Pabal	100	Jalka	60	Khiroda	165	Warwati	74
Bhiwadi	158	Botoni	50	Gawadewadi	130	Sakri	95
Asade	107	Mukutban	112	Pal	110	Talasari	105
Shivkar	154	Tandulwadi	119	Shindavane	169	Vikramgad	180
Hingangaon	93	Kem	97	Aravali Tak	118	Dongarsoni	91
Mangaon	126	Kurze	213	Sakri	89	Shirur	90
Mangli	125	Manchihill	169	Chhadvel	93	Rahimatpur	60
Shevali	97	Pal	148	Pabalwadi	63	Dhamari	204
Tilali	100	Lohara	180	Walaval	58	Belewadi	122
Bramhanvel	105	Kumbhawade	81	Wadad Hasol	94		

Total number of students in IBT program – **4879**

6. IBT instructor training was organized in Summer and Diwali holidays. They were organized at Pabal, Sakri (Dhule), Chikahlgaoon, Jalaka (Yawatmal) and Sira in Karnataka. Total 253 instructors and 25 teacher co-ordinators were trained.



7. Ms Shilpa Ballal (LAHI) along with Field officers conducted joint workshop of school management committee, Principal, teachers, Instructors and parents in 18 IBT schools. She also collected feedback from students about IBT program. More than 700 students gave their opinion about IBT.

8. First IBT school in Karnataka – Domerenhally (started in collaboration with LAHI and YUVA) completed three year. VA conducted 10th std examination of students and certificates were given to them.

9. Minutes of meeting to include pre-vocational program as core subject with then Educational minister Mr Patangrao Kadam and Minister for technical education Mr Rajesh Tope at Mantralaya on 27th Jan 2009 was received in Sept 2009. Minister directed SSC board to implement the decision.

10. IBT – Non IBT comparison

A effect of IBT program on performance of IBT and regular (non-IBT) students was tested on 341 students in 3 schools in the first week of Feb 2010. The test was given to IXth std students, total 163 non IBT and 178 IBT students participated in the test. The school selected are from tribal , rural and ashramshala categories.

- The summary of the result are as follows –

	Information	Understanding	Apply	Analyze	Evaluate	Creativity
% increase in performance of IBT students over non IBT (overall)	11.71	22.7	36.28	20.95	55.3	63.39

11. This year was packed with various activities in IBT schools. For e.g Solar eclipse was observed in 30 schools using pinhole camera and eclipse goggles. Total 22 schools participated in vegetable solar drying competition. 311 IBT students visited Infosys campus in Pune. There were school level camps in 9 schools.

12. Suzlon Foundation

- Suzlon Foundation sanctioned IBT program for 25 schools. Last year program was started in 7 schools of Dhule and Nandurbar districts. This year 2 more schools (Dongarsoni and Pabalwadi) joined the program.
- IBT products exhibition, blood test – soil and water testing camps etc were organized in the schools. Camps for repairing of pipeline and taps. More activities on www.lah-impact.org
- Total value of community service given by Suzlon schools are : Rs. 97232/-
Fees collected : Rs. 37550/-
- Suzlon donated 32 computers to VA. They were installed in IBT schools. A training program for computer instructors was conducted by NASSCOM foundation from 26th-29th at Chadwell school.
- Our Field officer Mr.Ramakant, IBT instructor and 7 IBT instructors attended NASSCOM foundation conference in New Delhi from 4th – 6th Nov.
- Mr.Kiran Inamdar of Suzlon foundation conducted various sessions on career and entrepreneurship development with IBT students and instructors.
- Mr.Girishbhai Tanti (Head, Suzlon Energy Pvt. Ltd). , Mrs Seema tai Khot (Head , Suzlon foundation) and Mr.Kiran Inamdar visited Bramhnwel school on 4th March. Students displayed their projects and work done under IBT dept. They observes tree guards, bamboo solar dryer, solar cooker, Door made by them.

13. Bayer Foundation

- IBT program is being implemented in collaboration with NGO 'Prajayatna' in 5 schools in Karnataka. This is the second year of the program. VA is providing consultancy and training support to Prajayatna. This year, we introduced new activities like conducting biodiversity survey, photography, video shooting and making small movie, use of GPS in conducting survey, survey of business potential in village etc.

- A delegation of senior management of Bayer Asia Pacific group visited Changawara IBT School on 16th July. There were representatives of various countries (Indonesia, Philippines, Thailand, Malaysia, India, and China).
- Govt Educational officers and School principal from Karnataka visited Pabal and nearby IBT schools in March to study IBT implementation.

14. Bridge Loan

This year we have not given bridge loan to any students. So far we have given Rs. 270579.50/- as bridge loan to 10 students. Out of which Mr. Pandharinath Kolhe and Mr. Mangesh Tajane refunded their loan. Total amount refunded this year is Rs. 161290/-. Total outstanding amount is Rs. 19289.50/-

C) TECHNOLOGY

DST Core support:

Following is the brief of various R&D carried out. (*For more information on all above projects log on to www.wordpress.vigyanashram.com*)

1. Cottage scale Soya :-

The process of manufacturing soya-milk on cottage-scale is developed. A process to process soya in autoclave is developed to tackle issues like trypsin content in milk and temperature and pressure parameters. Different basic methods to test quality (Pines method for protein content) are identified. Various trials were conducted in soybean growing area of Maharashtra (Yawtmal/Sangali).

2. Admin Device :-

Designing of the hand help electronic Gadget is at final stage. At present schools teachers maintain various records manually. They need to do lots of clerical work to prepare reports etc. This takes time of their academic duties. The device will help teachers in recording data of students such as attendance, marks etc. The data can be easily integrated to generate various reports. VA filed a patent for the idea.

3. Effect of ZEBBA on CABBAGE under drip irrigation system:-

Zeba is super absorbent granules made from maize husk. When mixed with the soil, it absorbs 500 times water than its mass. Therefore when it rains or gets irrigation water, water is stored. We are getting this product from NGO called *Abundance Farming*

Program (Based in Portland, Oregon-USA) and trials are going on various field crops at Vigyan Ashram. AFP claims that use of Zeba will reduce water and nutrient requirement and increase food production by bringing non irrigated land (rain-fed) under cultivation. After completing field trials of all crops, we are planning to manufacture ZEBA in India under licence from AFP.

4. Construction of Low Cost Poly house :-

We constructed poly house using bamboo but experienced its advantages and disadvantages. In storm, bamboo poly house got damaged. We have modified design and made developed simple, cost effective and very strong poly house structure in less than 50% than market price. At VA, we tried several methods and conducting training in construction of poly houses. More than 45 technicians were trained in poly house construction and they are working at various places.

5. Transferring technologies through schools :-

Box type solar cooker, parabolic solar cooker, ARTI bamboo dryer, vermin composting, medicinal plants, organic pest control methods, humidity chamber, ferrocement etc are adopted from other organizations. They are deployed in various schools.

6. Feasibility study on the DG set on dual(diesel & biogas) mode:-

The study was conducted on the 4KW/ 5KVA diesel DG using biogas + diesel combination. Various non dung based feed were tried. The result indicates the DG set can operate efficiently at 3-3.5KW load condition with almost 30% reduction in the diesel consumption. We found Napier grass is better substitute for maize as feed. We started cultivating Napier grass and our plan is to use the available biogas for the power generation and generate biogas using the Napier grass.

7. Solar powered domestic egg incubator:-

Commercial hatcheries are having huge capacity of 10000-20000 eggs, at village level the requirement is of 100-200 eggs .The design challenge kindled our interest to develop a small capacity egg incubator. Considering power shortage and electricity cost, we decided



to use solar energy. Accordingly domestic egg incubator of capacity 100 was developed operating on the grid supply. Two trials were conducted till now and we got excellent result of 92% hatching rate in the last trail. At the same time work is under progress to operate the unit on the solar application. We have filed patent for the idea.

8. Paper Crete technology:-

Paper Crete is used in USA. There are many videos and documents available on Internet. In USA, newspapers are used to make papercrete. The advantages of papercrete are Light weight, good heat resistant (insulator). We are trying to use waste paper which cannot be recycled in garbage to make papercrete products such as standard bricks, blocks, flower pots, partition sheet, paved tiles, road side footpath, approach paths for the disables etc. We tried with many combinations of the paper, cement, sand, fly-ash, rise husk etc. We are working to arrive at correct formula of mixer. The work is under progress.

INDUSA

- The “Poly house Internal Management Course” was conducted in Vigyan Ashram 32 students got the training under the course as well Manual on course was published.
- We have constructed 3 Poly houses successfully in Vigyan Ashram campus.
- Dr.Kishan Bhatia donated \$10000 for the installation of solar cooking devices at Vigyan ashram and develops various food products and recipes using solar energy.

Engineering without border students Project

Every year we provide various engineering challenges to graduate students of Engineers without boarder’ . This year Seven students completed their projects with us. The details are available on www.engindia.net

FAB LAB

Vigyan Ashram co-hosted 5th International Fablab Forum and Symposium on Digital Fabrication in



collaboration with College of Engineering, Pune, and MIT-center for Bits and atoms-USA, Symboisis, NIF, NSIT-Delhi at Pune and Pabal from 16 to 21 August 2009. Two workshop on new research areas , sustainability and Fab operation were held at Pabal. The Symposium was held on 20th Aug and it was dedicated in the memory of Dr.S.S.Kalbag. Details of conference proceedings are available on <http://cba.mit.edu/events/09.08.FAB5/>

Training materials produced:

We have produced following training material

- Manual on polyhouse construction and its internal management is ready in Marathi language.
- Manual for Cottage scale Soya-milk production.
- Design manual for fabrication
- 'Vichara Prasha – Shodha Uttre' is also in advance stage of completion.
- National Institute of Open schooling is making DBRT text books in English language. Many of VA staff members are writing for the same. We have prepared first draft of all four section and submitted to NIOS.

D) Vigyan Ashram won GKN – Evolve Competition

A multinational company M/S GKN sinter Metal completed 250 years of its establishment. To celebrate on the occasion they organized an 'Evolve' competition on 'Development Ideas' . We received first idea prize during GKN 250 year' s celebration held at Science museum at London on 17th Sept. The award of £100,000 is declared for establishing 'Finishing school for rural youth'. We proposed to establish finishing school at Pabal. The facility created will be utilized to provide advanced specialized courses for IBT alumni, instructors and others.



E) Workshops / Seminar / Meetings

- Anil Joshi attended the design conference on 10th May 09, organized by NIF Ahmadabad at NCL, Pune.
- Rohan attended workshop on Digital Architecture organized by the Sinhagad College of Architecture on Friday, 9th October, 2009.
- Sachin and Anil Joshi attended 4 days workshop on NGO Management at Bhartiya Vidya Buvan, Mumbai.
- From 14th – 19th Feb. Yogesh, kulkarni, Mr.Prakash shah, Mr.Kumar Kulkarni, Mr.Paranjape, Mr.Anil Joshi, Mr.Avinash Dhobale visited NIOS, Delhi for finalizing DBRT books in English.
- Yogesh, Anil and Vinayak visited Thrive, Hyderabad from 21st – 24th Jan to learn the manufacturing & production technology of different LED products under franchises license from Thrive.
- A camp on various work based activities was organized from 17th – 19th March at Pabal. 27 students of Chafekar Gurukul, Chinchwad are participated in the training.
- Yogesh kulkarni Attended meeting on National Knowledge Network at Vigyan Bhavan, New Delhi on 10 March 2010.

F) Improving facilities at ashram

- Construction of new office room for DST core team is completed.
- Construction of a new Hostel was completed; Mr.Dai Meghaji and Geetu kalani has financially supported the construction of the Hostel.
- Construction of Hostel cum guest room was completed; Cognizant financially supported the construction.
- Lend-a-hand-India donated construction and furniture raw material. This is used for making hostel and classroom furniture.
- Farm Tank of 7 lac ltrs. Capacity is constructed for Vigyan Ashram. INDUSA supported in constructing Farm tank.
- A new modem was purchased for internet,
- Video Camera purchased Make: Sony Model: DCR-HC54
- Digital Camera purchased Make: Kodak Model: M1063,

- 1TB External Hard Drive for take back up of computer data
- A new 'Kadaba kutti' machine Purchased and old machine was scrapped.

G) ADRA Project :

Earthquake rehabilitation project was completed and closed this year. We have completed Dome Painting, distribution of goats to SHG members and installation of Gym for the youths in Gubal village. Library was setup with the help of 'Rural relations' in Gubal. A local management committee was formed and project was handover to committee.

The villagers did not follow proper procedure while painting the dome. Original colour was not scrapped. This resulted in washing off the colour of many domes.

H) Exhibitions,/ Award/Recognition:

- GMRT- Khodad: A science exhibition was organized at Khodad by GMRT on occasion of science day on 28th and 29th Feb.
- **30th July: Open House exhibition** → An open house exhibition is organized on the 6th anniversary of Dr.Kalbag. We felicitated our DBRT alumni Mr.Swapnil Kawale with YUVA UDYOJAK PURSKAR' 2009. He is successfully doing farming in his native village Junnar. Our alumni Mr.Dinesh Adawilkar was chief guest on the occasion. Hon. Minister of finance of Maharashtra state Mr. Dilip Walse Patil Visited Ashram on the occasion and announced support of Rs.1 crore from Govt of Maharashtra for developing facilities at ashram.
- Mr.Kailash Jadhav and Mr.Laxman Jadhav received JNV fellowship of MS Swaminathan foundation
- Farzana Tamboli selected for Tata Jagurti Yatra.
- Bhairavnath Ganesh Mandal, Pabal honour Vigyan Ashram by giving "Tantravikas Puskar" .

J) Visitors:

More than 5000 visitors visited ashram this year. Many school, colleges , farmer groups visits us to see application of rural technology and education. Important visitors to VA are as follows -

1. Asha for education-Pune chapter visited ashram on 5th April as a part of their monthly event with voluntary organisation.
2. Dr.Kishan Bhatia visited ashram on 13th April.
3. A leading columnist and political activist Mr.Sudheendra Kulkarni visited ashram on Sept. 22
4. GKN Sinter Metal global executive team visited VA on 27th Jan. GKN group HR Director Mr.Doug McIldowie visited VA on 4th Jan.
5. A team of Asha for education-Pune chapter visited Pabal on 31st Jan. Asha is funding DBRT program and the visit is regular six monthly review visit of the progress made
6. Ms. Sunanda Mane Visited Vigyan Ashram on 28th Feb.
7. Hon finance Minister Mr.Dilip Walse Patil and speaker Mr.Vasant Dawkhare visited ashram on 30th July.

K) Donations to Ashram

Vigyan Ashram is thankful to donors and well wishers. Their contribution helped us to fulfill many necessities at ashram.

Sr.	Name	Donation In RS.
1	Sheela Sancheti	1000
2	Deepa Kulkarni	500
3	Vasant Bhade	1250
4	Chandrakamal parivar kalian Trust	750
5	Mrs.Yogita Parulekar	43000
6	Mr.Navin and Geetu Kalani	50000
7	Mr.Gajanan Deshpande.	6000
8	Mr.Shah Prafula	1000
9	Mr.Rohit Vilas Raut	500
10	Mr.Kulkarni Dhananjay	200
11	Mr.Bharat Pachange	500
12	Ms. Ranjana Walekar	2000
13	Swami Vivekanand College of Education	700
14	Janata Shikshan Sanstha	2000

15	Anand Gosavi	400
16	Mr. Dhangat	3000
17	Mr. Dai Meghaji	106000
18	Mr. V.V. Shirwlkar	2000
19	Mr. C.M. Pandit	5000
20	Mr. Bhatwadekar	10000
21	Mr. Sanjeev Bhagewat	5000
22	Jeshta Nagarik Sangh	1300
23	Vishwam Kotham	5000
		247100

Apart from monetary contribution many people donated equipment to Vigyan Ashram in kinds.

Mr. Gajanan Deshpande donated construction Material.

L) Projects Completed this year

Pedal Power with SBC	World Bank
ADRA Dome Painting	ADRA
Poly house Development	INDUSA

M) On going Projects:

DBRT program	Asha for education – Seattle, Mr. Diamond Meghaji, LAHI, Honeywell
Plan100	Lend-a-hand-India,
IBT	Asha for education-Seattle,Suzlon foundation , Bayer crop sciences , cognizant, Lend-a-hand-India, AID - chicago
Improving facilities in ashram	Lend-a-hand-india and many individuals
Bridge Loan	Lend-a-hand-india
DST Core	DST, (Govt. of India)
ADRA	ADRA
Improving Agri. facilities	INDUSA

N) Staff Matters

Following staff joined this year:

Mr. Abhay Patil (DST), Mr. Santosh Shinde (agri Section.), Mr.Vinayak Dharmadhikari (FABLAB), Ms Apeksha Bochare (FABLAB), Mr. Avinash Dhobale (DST), Mr.Ranjit Shanbag (DST), Mr.Vivek Mahale (AH), Mr.Kisan Pande (IBT), Ms. Mayuri Ghumatkar (H&H).

Following staff resigned this Year:

Balu Jadhav (DST), Mr.Manchare (IBT FO) Mr. Rohan Choukar (DST), Mr. Abhay Patil (DST), Satosh Shinde (Agri)

Total staff: 29

{DBRT: 9, IBT: 8, Kitchen: 3, computer: 1, FABLAB- 1 DST: 4, Director: 1, Pune Office : 3}

O) Program Advisory Committee:

PAC comprising of Dr. Waghmare, Dr. Gowarikar, Mr.Ashok Kalbag, Mr.Vijay Kumar, Mr.Sunil Kulkarni, Mr.Anil Bahuman, Mr.Sanjay Shembade, Mrs Mira Kalbag and Mr.Yogesh Kulkarni held their meetings on 4th Jan 09, 5th April, 21st May & 26th Sept at Pabal.

Vigyan Ashram is thankful to PAC member and Board of trustees of Indian Institute Of Education for their support and guidance.

P) Volunteers :

Vigyan Ashram appreciates efforts taken by following volunteers in promoting VA program. They are always available on call for all kind of support VA needs from time to time.

Mr Sameer Shipurkar, Ms Shilpa Ballal, Mr Sunil Bhondage, Mr Kiran Inamdar, Mrs. Sunanda Mane, Mr Abhay Patil, Mrs Alpana Vijaykumar.

Vigyan Ashram also acknowledge support of villagers in Pabal for their continuous support

Finance:

Income Expense Summary 2009-2010

Sr.No	Name of Project	Opening Balance	Receipt	Expenses	Closing Balance	
1	ADRA	273465		223187	50278	
2	VAM Pabal Campus					
	DBRT	116332.27	326391	356693	86030.27	
	IBT Asha	61236.88	126148		187384.9	
	Pedal Power	-35685			-35685	(Project closed)
	SSA Project	-4630			-4630	(Project closed)
	Improving Facilities	-27154.2	247100		219945.8	
	Wi-Fi	63336			63336	
	Asha Project (Pabal)	234559.33	530708	481683	283584.3	
	VAM			340870	-340870	
	Fab Lab	20309.67			20309.67	
	Total	428304.95	1230347	1179246	479406	
3	WRD	1195			1195	
4	Bayer	-46477	34000		-12477	
5	Indusa Project	164404.08	494422	541538	117288.1	
6	LED Project	-12303.5	12303.5		0	Project closed
7	Bridge Loan	233596.5	69354.5		302951	
8	PLAN 100	-253544.05	4063665	3759657.85	50463.1	
9	Core Grant	1276248		1108555	167693	
10	SUZLON	-121050.14	1385313	1019740	244522.9	
11	YUVA	73111		62360	10751	
12	Suzlon AH	179547			179547	
13	Shiksha	-13152			-13152	(To be close)
	Total	2003797.84	7289405	7894283.85	1398919	

As per IIE account dept. VA corpus as on 31st March 2009 is Rs. 6678367.57 /-