



Vidnyanvahini

Annual Report 2014-2015



संवाद आणि कृतिगत

*Two Decades of
Vidnyanvahini*



More than two decades ago Pushpa and Madhukar Deshpande returned to India from the US driven by a dream of setting up a mobile science laboratory that would help in nurturing scientific temperament in students of rural schools in Maharashtra. They gathered around their friends who shared their dream. After overcoming numerous obstacles that cropped up, the Mobile Science Laboratory - an innovatively designed bus carrying lab apparatus, audio visual equipment etc. - made its first school visit to Nutan Madhyamik Vidyalaya at Wadki, a village 25 kms from Pune on 11 July 1995. Vidnyanvahini was born.

In the two decades since those pioneering days, the Mobile Science Laboratory has travelled about 2,80,000 kms while making 2750 school visits and touching the lives of about 3,04,250 rural students spread over 24 districts of Maharashtra. Along the way, Vidnyanvahini helped out in transforming Surodi village through water conservation efforts and in setting up a science centre at Anadur. Vidnyanvahini's activities now extend to teacher training, student camps and a circulating library. In recent years Vidnyanvahini has also been making forays out of Maharashtra to the states of Arunachal Pradesh, Nagaland, Assam, Madhya Pradesh and Karnataka.



Volunteer members of the Dialogue and Action Group (DAG) of Vidnyanvahini photographed in front of the Mobile Science Laboratory

Front cover photos (clockwise from top) : Optics expt at Shirpunje (Nagar Dist.) school; Air pressure expt at Arunachal Pradesh school; Ohm's Law expt at Sonavade (Ratnagiri Dist) school

Vidnyanvahini

Members of Dialogue & Action group

President

Pushpa Deshpande

Secretary

Sharad Godse

Aparna Ambekar

Rohini Atre

Mukund Bhadbhade

Narendra Bhide

Dr Madhukar Deshpande

Dr Pradnya Deshpande

Dattatray Dewal

Vinayak Dixit

Vivek Erande

Govind Gadgil

Umesh Godbole

Snehal Godse

Shailaja Joshi

Dr. Suvarnalata Kandalgaonkar

Meghana Mhaskar

Shirish Mokashi

Nalini Mungel

Pushpa Palkar

Urmila Parchure

Shubhangi Parkar

Jayant Phalke

Dr Kiran Phatak

Ashok Prabhu

Nirmal Rege

Ashok Rupner

Achyut Sapre

Nirmal Sathe

Atik Sheikh

Shreenivas Tatake

Ulhas Vaishampayan

Suresh Yerunkar

VIDNYANVAHINI, PUNE
Public Trust Registration No E 2024, Pune
Donations tax exempt under section 80G
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VIDNYANVAHINI

MOBILE SCIENCE LABORATORY

Annual Report for the period April 2014 to March 2015

About Vidnyanvahini

Vidnyanvahini's mission is to reduce the gap in the standards of science teaching between rural and urban schools by offering rural school children a means of learning science through laboratory experiments.

The flagship project of Vidnyanvahini is the Mobile Science Laboratory (MSL): a minibus designed to accommodate storage for lab apparatus, audio-visual equipment, laptops, an uninterruptible power supply powered by the engine battery, a generator, portable lab tables and an overhead water tank.

The backbone of Vidnyanvahini is its team of volunteers consisting of retired scientists, engineers, and science teachers collectively called the Dialogue and Action Group (DAG). The MSL carries a team of six members of DAG to the selected school on a given day. Priority is given to small rural high schools, which lack a science laboratory and do not enjoy state grants. During a tightly organised full-day session, students perform some science experiments themselves in groups of 4 to 6 and observe demonstration of others. The theoretical principles underlying the experiments are also explained to them with the aid of educational audio-visual material. Students are also provided guidance on issues faced during adolescence.

In addition to school visits, a number of teacher-training workshops are held to enhance science-teaching skills among rural school teachers. An annual student camp seeks to expose rural students to a wide variety of science and technology related topics through presentations from subject experts and visits to factories/ laboratories. Several book-bags are also circulated among schools to act as mobile libraries.

Vidnyanvahini is a not-for-profit organization constituted as a public trust, which does not charge schools for its visits and operates solely on public donations. In January 2015 Vidnyanvahini completed 20 years of service. During this period the Mobile Science Laboratory travelled about 2,80,000 kms while making 2750 school visits and touching the lives of about 3,04,500 rural students spread over 24 districts of Maharashtra. Over the last two years Vidnyanvahini has been venturing out of Maharashtra through school visits in the states of Arunachal Pradesh, Nagaland, Assam, Madhya Pradesh and Karnataka.

This report summarises the activities of the organisation for the period April 2014 to March 2015.

" It's been a pleasure to be associated with Vidnyanvahini from last 2 years. All our team members enjoyed the learned company of Vidnyanvahini teachers."

Sevasadhana, Malghar, Chiplun
(Ratnagiri district)



Vidnyanvahini activities at-a-glance

The following table provides a summary of the major activities of Vidnyanvahini during the year 2014-15.

Number of Mobile Science Laboratory (MSL) visits to rural schools	162
Number of schools visited*	132
Number of schools visited once in the year	102
Number of schools visited twice in the year	30
Number of visits to unaided or partly aided schools	22
Number of students who benefited by the MSL visits	20250
Number of outstation visits (each lasting 3 to 5 days)	8
Number of Kms logged by the MSL	13321
Number of science teachers' workshop days	5
Number of student camp days	5
Number of schools using mobile library	6

These activities are described in detail in the following paragraphs.

School visits

During the year 162 visits were made to rural schools falling in states of Maharashtra, Arunachal Pradesh, Karnataka and Madhya Pradesh states by the Vidnyanvahini team.

Apart from visits to schools in and around Pune (which are covered during a single day) Vidnyanvahini also undertook 8 outstation visits- typically lasting three to five days each- to the following places: Kavathepiran (Sangli district), Vaijapur (Aurangabad district), Bhusaval (Jalgaon district), Palsunde (Ahmednagar District), Nipani (Belgaum district - Karnataka), Rajapur (Ratnagiri district), Devrukh (Ratnagiri district) and Malghar (Ratnagiri District) . These visits were sponsored by organisations/ schools in those places and were used to cover rural schools in the surrounding areas. In addition to the above visits a number of short visits of 2 or 3 day duration were made using a hired vehicle to schools whose requests for Vidnyanvahini visits could not be fitted in the regular schedule.

The trend begun last year of visiting schools in Northeast states was carried forward this year by visiting 17 schools in Arunachal Pradesh. To further strengthen the link with Arunachal Pradesh

* Some schools are visited twice in the year. Hence the number of school visits is less than the number of MSL visits

a residential camp for students from these schools is proposed to be conducted in Pune. (This has since been held in June 2015). In addition, Vidnyanvahini also ventured into Pench district of Madhya Pradesh. Three short visits were made to this backward district covering ten schools in the thickly forested area bordering Maharashtra and Madhya Pradesh.

Teacher workshops

Vidnyanvahini conducted three teacher workshops during the year: Two workshops lasting two days each at Chiplun (dist. Ratnagiri) and Pen (dist. Raigad) and one workshop for a single day at Jamkhed (dist. Ahmednagar). The subjects covered included atomic structure, radioactivity, chemical bonds, periodic table, electricity and light. In all 120 teachers attended these workshops.

" I had studied atomic structure and had also taught it for many years. But it was only today that I really understood it"

Participant in the Science Teachers" Workshop.

Vidnyanvahini was also invited to a teacher workshop at Guwahati, Assam which was conducted under their Sarva Shiksha Abhiyan program. Shri Sharad Godse represented Vidnyanvahini at that workshop which lasted three days and was attended by 65 teachers.

Miscellaneous activities

Vidnyanvahini was invited to participate in a two-day science exhibition at Jamnagar, Gujarat. This exhibition was sponsored by the Essar Group. Further, as in past years, Vidnyanvahini put up a stall at the annual science exhibition held at Khodad by GMRT which manages the large radio telescope installation there. The exhibits this year were in tune with the fact that 2015 has been declared as International Year of Light and its applications.

While most of Vidnyanvahini's work is centred around rural schools, as an exception, a two day science experiment- based workshop was also conducted this year in Pune in association with Navanirmiti Learning foundation, an NGO engaged in popularizing science and maths. This workshop was attended by 40 students of schools in central Pune.

Student camp

Vidnyanvahini has been conducting an annual *Vidyarthi Shibir* (student camp) in Pune for many years. The camp attended by students of rural schools seeks to widen their knowledge horizon by exposing them to a diverse range of experiences through factory visits, presentations from experts etc.

" The shibir taught us the importance of self-reliance, discipline, punctuality and scientific temperament."

Extract from the report on the student camp by Sudhatai Patil Kanya Prashala, Islampur.

This year the camp was held from 17 to 21 June 2014. It was attended by 32 students (15 girls, 17 boys) and 8 teachers selected



from schools visited by Vidnyanvahini. The highlights of the camp were the following presentations/ activities:

- 'Accordion music' by Shri Anil Gode,
- 'Rocks and minerals' by D Ajit Wartak,
- 'Swatantryaveer Sawarkar' Shri N.M.Joshi,
- Science experiments demonstrated by Shri Ashok Rupner,
- 'Story of the heart' by Shri Yogesh Gurjar,
- 'Health issues during growing years' by Dr Abhay Mule,
- 'Biology in space' by Dr Shyamrao Tilak,
- 'Traditional building methods' by Shri Pravin Mali and Smt Vidya Mali,
- Making sketches by nails of fingers by Shri Vijay Chawathe

The participants were also taken for visits to Indian Institute of Science Education and Research (IISER), the Indian Air Force Station at Lohagaon and the Kalyani Lemmerz factory, Chakan.

A highlight of the workshop was a meeting of the participants with Ms Gauri Gadgil and her family, whose struggle in overcoming her disability was found inspirational by all. The movie 'Yellow' based on her life was also screened during that time.

Mobile library

To encourage the habit of reading among students, Vidnyanvahini has been circulating book bags among schools. The bag contains about forty books on science and related subjects and is kept in a school for a term. During 2014-15 this 'Mobile Library' was used by six schools.

Meetings of the Dialogue and Action Group

The Dialogue and Action Group (DAG), comprising volunteers who work with Vidnyanvahini, meets periodically to review performance and discuss operational changes. During 2014-15 these meetings were held 4 times.

The 20th annual meeting of DAG was held on 9 and 10 March 2015 at the Dhayari office of Vidnyanvahini. This meeting was utilized to review the activities of the previous year, make plans for the activities of next year, make changes to the list of schools and outstation visits, decide on changes to curricula and experiments etc.

Surodi

Vidnyanvahini has been involved in a watershed development project at Surodi, a village in Ahmednagar district about 120 kms from Pune, with financial support by Association for India's

Development (AID), USA. As described in the previous annual reports this project has been highly successful with the village showing significant increase in the household incomes as a result of the increased availability of water for farming. During last year when the surrounding areas have suffered from draught the village wells continued to have adequate water for drinking purposes.

Vidnyanvahini has also channelized aid to the science activity centre in the village primary school. This school has continued to win prizes at various district and state level competitions.

Anadur Grameen Vidnyan Kendra

The *Vidnyan Kendra* at Anadur in Osmanabad district, jointly operated by Vidnyanvahini with Halo Medical Foundation, is running quite well. Students from nearby schools come regularly to the Vidnyan Kendra for doing experiments and learning science. Three instructors help with instruction and experimental help.

Recognition

Seth Chimanlal Govinddas Memorial Trust, Pune awarded Vidnyanvahini its annual prize in the field of social service. The award, carrying a prize amount of Rs 15000/-, was given at a function held on 6 July 2014 which was presided over by Shri Prakash Javadekar, Minister for Environment in the Government of India.

Benefactors

Numerous donors and well-wishers have been helping Vidnyanvahini through contributions in cash and kind. We are grateful for their generous gestures and the trust they have reposed in Vidnyanvahini. Some of these benefactors are mentioned below.

- M/s Cognizant Foundation have donated a mobile science laboratory vehicle and related equipment.
- M/s Bharat Petroleum Corporation Limited (BPCL) have been sponsoring the *Vidyarthi Shibir* for many years.
- Shri Ambar Naik and his associate Shri Jitendra Salunkhe have prepared the financial accounts and audit reports of Vidnyanvahini at no cost to the Trust.
- The Vidyarthi Sahayyak Samiti, Pune has helped by providing lodging facility at their hostel at concessional charges for Vidnyanvahini's *Vidyarthi Shibir* year after year.
- Shri Namadeo Salunkhe of Sahyadri Chemicals has been supplying the chemicals required for Chemistry experiments free of cost.



- Shri Vasant Nehate of Corona Systems has been supplying equipment required for some Physics experiments free of cost.
- M/s Johnson and Johnson have supported permanent exhibits at Dhayri on chemical bonds and valency with a supplementary grant.
- M/s Shree J Printers Pvt Ltd. have undertaken printing of the annual report at a concessional cost since 2009.

In addition to the above, donor agencies based in USA (such as India Development Service), Indian corporates, charitable trusts as well as many individual donors have made financial donations to Vidnyanvahini. A list of donors is enclosed at annexure 1.

Financial statements

Copies of the audited balance sheet and income and expenditure account for the year ended 31 March 2015 are enclosed.

List of donors

Rs. 10,000/- and above

Shri P H Ravikumar
Shri Arun Vishnu Phalke
Ms Mary Ann Searing
Ms Chitra Damle
Shri Vijay Deshpande
Dr Nilima Sant
Ms Meena Vaishampayan
Ms S S Kandalgaonkar

Rs. 5,000/- and above but less than Rs. 10,000/-

Shri Priyadarshan Phaltankar
Shri Ashok G Khandekar
Inner Wheel Club, Bhusaval
Shri S V Khandekar
Ms Anjali P Badwe
Ms Pratima Vaishampayan
Shri Atul Vishampayan
Shri S S Gurjar
Dr M G Deshpande
Shri Amber Naik
Ms Smita Marathe

Less than Rs 5,000/-

Shri Sharad Godse
Shri Deepak Deshpande
Shri A P Joag
Ms Nikita Kale
Shri J V Phalke
Shri Jitendra Salunkhe
Ms Shaila Damle
Ms Anjali Bapat
Dr A Mulay
Bhairavnath High School, Varale
Ms Pragati Patil



THE BOMBAY PUBLIC TRUSTS ACT, 1950

SCHEDULE VIII

Name of the Trust : Vidnyan Vahini

Registration Number: E - 2024 / Pune

Balance Sheet as at 31st March 2015

Funds and Liabilities	Amount(Rs)	Fixed Assets	Amount(Rs)
Trusts Funds or Corpus	96,19,970	Immovable Properties - (at cost)	11,05,730
Schedule 1			
Bal. as per last Balance Sheet	96,19,970	(Suitable classified giving mode of valuation)	-
Add: During the year	-	during the year	
Other Earmarked Funds (Schdule 2)	70,344	(Refer Fixed Assets Schedules 3)	
(Created under the provisions of the Trust deed or scheme or out of the Income)		Investments	53,26,222
Opening Balance	98,114	Schedule 4	
ADD: During the Year	-	HDFC and RBI Bonds	18,00,000
Less: Transfer	27,770	Bank fixed Deposits	35,26,222
Loans (Secured or Unsecured)		(Refer Fixed Assets Schedules 3)	
From Trustees		Furniture and Fixtures	
From Others		Bal. as per last Balance Sheet	12,86,213
Add : During the year		Additions during the year	2,025
		Less : Sales during the year	-
		Less : Depreciation upto date	2,42,019
			10,46,218
Liabilities		Loans (Secured or Unsecured) :	
For Expenses	-	Loan Scholarships	-
For Advances	-	Other Loans	-
For Rent and other deposits	-		
For Sundry Credit Balance	-	Advances Schedule 5	
		To TDS	2,60,889
		To Trustees	-
		To Employees	-
		To Contractors	-
		To Lawyers	-
		To Others	11,00,000
			13,60,889
		Income Outstanding	
		Rent	-
		Interest	9,410
		Other Income - cheque in hand	20,000
			29,410
		Cash & Bank Balances	
		(a) In Current / Saving account	5,24,252
		(Schedule 5)	
		(b) With the trustee	-
		(c) With the Manager	-
		(d) Cash Balance	32,200
			5,56,451
		Grant Receivable (From ICSSR)	
			-
Income and Expenditure Account		Income and Expenditure Account	
Bal. as per last Balance Sheet	-	Bal. as per last Balance Sheet	73,399
Less : Appropriation if any	-	Less : Surplus	-
Add : Surplus	-	Add : Deficit	1,91,994
Less : Deficit	-		2,65,394
Total (Rs.)	96,90,314	Total (Rs.)	96,90,314

For Ambar Naik & Associates

Proprietor
Mr. Ambar S Naik
Place : Pune
Date :
Membership No. 157493



For Vidnyan Vahini

Place : Pune
Trustee
Date :

Place : Pune
Trustee
Date :

THE BOMBAY PUBLIC TRUSTS ACT, 1950

SCHEDULE IX

Name of the Trust : Vidnyan Vahini

Registration Number: E-2024/Pune

Income and Expenditure Account for the year ended on 31st March 2015

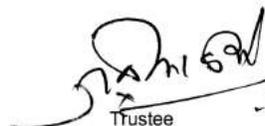
Particulars	Amount(Rs)	Particulars	Amount(Rs)
To Expenditure in respect of properties:-	54,516.00	By Rent [accrued]	Nil
Rates, Taxes, Cess	-	By Interest [accrued] (Refer Schedule 6)	3,68,338.95
Repairs and Maintenance	26,256.00	On Securities	
RTO Taxes paid	3,000.00	On Bank Fds	3,61,083.95
Vehicle Insurance	25,260.00	On Loans	
Depreciation [by way of provision or adjustment]	-	On Bank Account (Saving Bank)	7,255.00
To Eastablistment Expenses	-	On FCRA Saving	-
To Remuneration to Trustees	-	By Dividend	Nil
To Remuneration [in case of a math] to the head of the math including his household expenditure, if any	-	By Donations is cash or kind	3,50,196.00
To Legal Expenses	-	By Income from other Sources [in details as far as possible] Interest on Bond	1,44,000.00
To Audit Fees	5,000.00	By Sale of Books	6,787.00
To Contribution and Fees	-	By DVD's and CD's Sales	1,352.00
To Amount written off		By Misc Income (Insurance and Reimbursement of Exp)	57,723.00
(a) Bad Debts	-		
(b) Loan Scholarships	-		
(c) Irrecoverable Items	-		
(d) Other items	-		
To Miscellaneous Expenses	455.00		
To Depreciation	2,42,019.31		
To Expenditure on objects of the trust			
(a) Religious			
(b) Educational (incl.surodi activity) (Schedule 7)	5,66,358.00		
(c) Medical Relief			
(d) Relief of poverty			
(e) Other Charitable objects	8,18,401.00	By Transfers from Reserve	
To Surplus carried to Balance Sheet		By Deficit carried over to Balance Sheet	1,91,994.36
Total (Rs.)	<u>11,20,391.31</u>	Total (Rs.)	<u>11,20,391.31</u>

For Ambar Naik & Associates

For Vidnyan Vahini


Prop.
Mr. Ambar S Naik
Place : Pune
Date :
Membership No. 157493




Trustee

Place: Pune
Date :


Trustee

Place: Pune
Date :

विश्वस्त विश्वस्त
विज्ञानवाहिनी, पुणे
सार्वजनिक न्यास संस्था क्र. ई-2024

THE YEAR IN PICTURES



Properties of electricity being demonstrated at a *melawa* in Aurangabad



Teacher training program Nagaland



Gauri Gadgil with her painting at *Vidyarathi shibir*



Model of human skeleton at Navanirmiti student workshop



Vidnyanvahini stall at Khodad science exhibition



Chemistry expt at Pench, Madhya Pradesh

“खेडेगावातील मुलांना पुस्तकातले प्रयोग स्वतःला करायला मिळणे; ‘संभाळ फोडशील ती नळी’ अशा इशान्याशिवाय; ‘घाबरू नका, फुटले तर फुटू देत’ अशा आश्वासक बोलाबरोबर; एक परिपूर्ण प्रयोगशाळा उपलब्ध होणे ही जिल्ह्यातल्या सर्वांसाठी नवलाई होती...”

सारस्वत सहाय्यक मंडळी मुंबई, ज्यांनी विज्ञानवाहिनीला रत्नागिरी जिल्ह्यातील ग्रामीण शाळांना भेटी देण्यास आमंत्रण दिले, त्यांचा प्रतिसाद.