



A Global Grant Project – Water Filtration Systems

Rotary Clubs of State College, PA, USA & Bandra West, Maharashtra, India



Project Synopsis

The project aims to provide the school going kids in rural Palghar with clean and safe drinking water.

Rotary Club of State College, PA, USA
Rotary Club of Bandra W, Maharashtra, India
Rotary Club of Palghar, Maharashtra, India

The project will install **water filtration systems** to provide safe and clean drinking water in various schools in Palghar district in Maharashtra state, India.



Thirty Schools have been identified in the initial phase

LOCATIONS

| S. No | Name of Schools | No. of students and staff | Machine Capacity (In LPH) | S. No | Name of Schools | No. of students and staff | Machine Capacity (In LPH) |
|-------|----------------------------------------|---------------------------|---------------------------|-------|-------------------------------|---------------------------|---------------------------|
| 1 | S.T.Kadam Vidyalay Palghar | 2450 | 500 Ltr | 16 | Dativare English Highschool | 150 | 100 Ltr |
| 2 | H.M.Rajguru Vidyalaya, Saphale | 1730 | 500 Ltr | 17 | Z.P.School, Khutadpada | 83 | 50 Ltr |
| 3 | Sau Y.J.Nijap Highschool | 830 | 500 Ltr | 18 | Z.P.School, Gundave | 64 | 50 Ltr |
| 4 | Adarsh Vidya Mandir, Kelve | 756 | 500 Ltr | 19 | Z.P.School, Vagulsar | 57 | 50 Ltr |
| 5 | N.L. Patil Madhyamik Vidyalay Sativali | 642 | 500 Ltr | 20 | Z.P.School, Varkunti | 46 | 50 Ltr |
| 6 | Abhinav Vidyalay, Virathan | 494 | 500 Ltr | 21 | Z.P.School, Pochade | 45 | 50 Ltr |
| 7 | Vidya Mandir, Dapchari | 405 | 500 Ltr | 22 | Z.P.School, Tamsai | 44 | 50 Ltr |
| 8 | Vidyabhavan, Edvan | 386 | 100 Ltr | 23 | Z.P.School, Vasare | 42 | 50 Ltr |
| 9 | A.J.Chaudhari Prathamik Vidyalay | 330 | 100 Ltr | 24 | Z.P.School, Valvipada | 35 | 50 Ltr |
| 10 | Madhyamik Vidyalay Bhagini Samaj Pal | 306 | 100 Ltr | 25 | Z.P.School, Gharatpada Sonave | 33 | 50 Ltr |
| 11 | Kev Vibhag High School, Kev | 296 | 100 Ltr | 26 | Z.P.School, Netali | 32 | 50 Ltr |
| 12 | Z.P.School, Aagavan | 215 | 100 Ltr | 27 | Z.P.School, Kolhemal | 32 | 50 Ltr |
| 13 | Madhyamik Vidyalay, Pargaon | 206 | 100 Ltr | 28 | Z.P.School, Kude Satvipada | 31 | 50 Ltr |
| 14 | Madhyamik Vidyalay, Hamarapur | 179 | 100 Ltr | 29 | Z.P.School, Katale | 30 | 50 Ltr |
| 15 | Pandurang Narayan Kore Vidyalay, | 177 | 100 Ltr | 30 | Z.P.School, Pawarpda, Umroli | 20 | 50 Ltr |

Number of Schools: 30

Number of Students and Staffs: 20-2450



India's Looming Water Crisis

- India is ranked amongst the worst countries in the world for the number of people living without safe drinking water.

- UNICEF claims that less than 50% of the population in India has access to safely managed drinking water.

- The report also says the chemical contamination of water, mainly through fluoride and arsenic, is present in 1.96 million dwellings.



The report titled 'Composite Water Management Index' released by the government think tank NITI Aayog states:

Approximately 200,000 people die every year from the lack of access to safe water

The World Bank estimates that **21% of communicable diseases** in India are related to unsafe drinking water.

Around **37.7 million Indians** are affected by water-borne diseases annually. **75%** of them are children.



Unsafe water stunting growth of children

According to studies published by 'India State-Level Disease Burden':

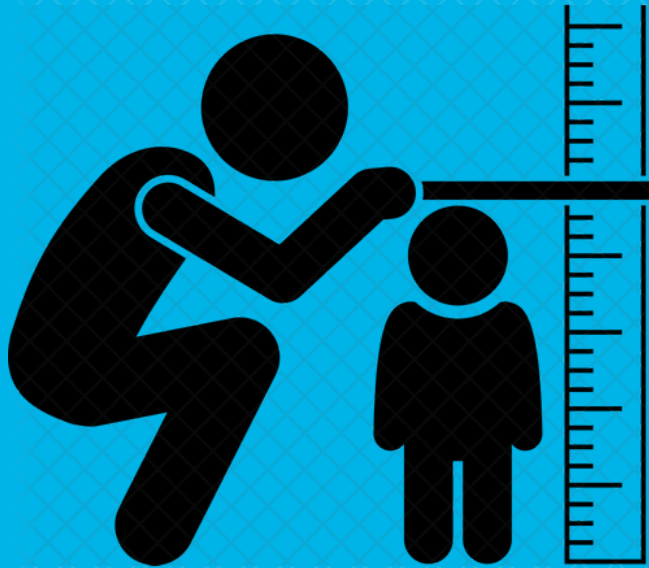
Unsafe water is among the leading causes of **under-five fatalities** in India along with malnutrition

10.8% of under-five deaths are attributed to unsafe water



Children who manage to survive have **weakened immune system** and become underweight and malnourished.

This has a severe impact on their learning ability throughout their lives.



“Children in India are **shorter** and more **underweight** because their bodies use up all energy to fight frequent infections, lowering their strength and growth,” said Aidan Cronin, child's environment programme, UNICEF.

Why do we need water purification systems in schools?

- Around **30%** of rural schools in India lack access to safe drinking water on school premises.
- Illness due to water-borne diseases is the primary reason for absenteeism from schools in rural India.
- More than **40%** of diarrhea cases in school children are contracted at school rather than at home.

- Unified District Information System for Education (UDISE)



Dispenser in one of the schools in Palghar

Water Filtration Systems

-Social Benefits



Reduce the use of plastic bottles

A pure fresh and safe drinking water for the community

Develop local skills in operating and managing these systems

Improve the health conditions of the impact population

Decrease child and infant mortality

Water Filtration Solutions

**Anandi Specialities
& Services Pvt. Ltd**



BePure Water Purifiers



Anandi Specialities & Services Pvt. Ltd



Rajendra Sankhe
(Company CEO)

Bepure Tech Pvt. Ltd. is a 21st century purification company for the sales & service of domestic and commercial purification systems. The company had started its operation since 1999 but the next generation of the company has revamped the brand to suit the needs of the modern customer with the latest technologies.

— Vision —

"Our vision is to reach out to all the water purification needs in the country and develop the most innovative solutions with unmatched quality."



Anandi Specialities & Services Pvt. Ltd



| | |
|------------------------------|------------------------------------------------|
| CIN | U29253MH2011PTC224281 |
| Company Name | ANANDI SPECIALITIES & SERVICES PRIVATE LIMITED |
| Company Status | Active |
| RoC | RoC-Mumbai |
| Registration Number | 224281 |
| Company Category | Company limited by Shares |
| Company Sub Category | Non-govt company |
| Class of Company | Private |
| Date of Incorporation | 23 November 2011 |
| Age of Company | 9 years, 6 month, 9 days |
| Activity | Manufacture of special purpose machinery |

Pricing

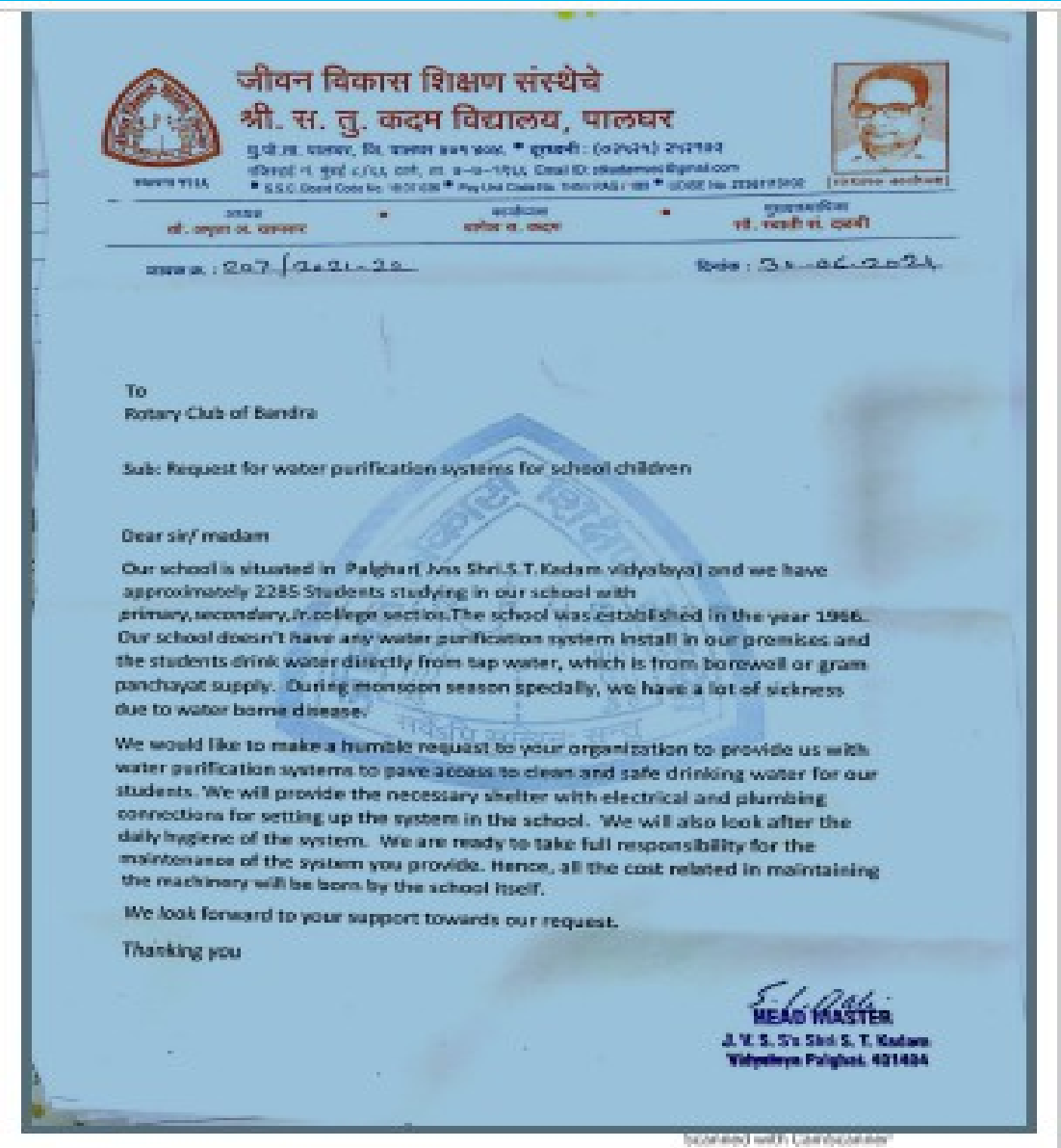
| ANANDI SPECIALITIES & SERVICES PVT. LTD. | | | | |
|-----------------------------------------------------------------|----------|------------------------------------------------------------------------------|--------------------|--------------|
| S.no. | Capacity | Specifications | Unit Rate | No. of Units |
| 1 | 50 LPH | Material-SS304 Taps- 1 Storage- 40 litres Delivery- Within 4 weeks | ₹ 58,000 | 14 |
| 2 | 100 LPH | Material-SS304 Taps- 1 Storage- 40 litres Delivery- Within 4 weeks | ₹ 78,000 | 9 |
| 3 | 500 LPH | Material-SS304 Taps- 3 Storage- 300 litres Delivery- Within 4 weeks | ₹ 1,48,000 | 7 |
| Payment terms: 100% advance against pro-forma invoice | | | | |
| Subtotal | | | ₹ 25,50,000 | |
| Tax% | | | 18% | |
| Tax | | | ₹ 4,59,000 | |
| Total | | | ₹ 30,09,000 | |

Total Cost (in US \$)

\$1 = Rs. 73.25

Total Cost: \$41K

Maintenance



All schools are taking the responsibility of maintaining and servicing the systems after installation and training. A sample maintenance letter shown here.

ANANDI SPECIALITIES & SERVICES PVT. LTD.

- **Life of machinery:** Avg. 10 years(although customers haven't faced any trouble yet even in 15 years of usage).
- **Breakdown cost:** **No Charge** (due to the comprehensive AMC listed by the company).
- **Maintenance cost:** Rs 12,000 to be fixed over the years
- **Time of fixation:** Within 24 hrs (As the Service and Manufacturing center is situated in Palghar)
- **Electricity consumption:**
 - 500 LPH- 1.5 KW
 - 100 LPH- 0.8 KW
 - 50 LPH- 0.5 KW

5 year cost of the filtration system

| | 1 st year* | 2 nd year | 3 rd year | 4 th year | 5 th year |
|-------------------------|-----------------------|----------------------|----------------------|----------------------|----------------------|
| 50/100/500 LPH Machines | 0 | 12000 | 12000 | 12000 | 12000 |

Rs 12000 = approx US \$170

(* that first year cost maintenance cost included in capex)

UK club provides RO water to schools

V Muthukumaran

A visit to a new facility being constructed by his company, Flint Group, at Vadodara, Gujarat, by Rtn Russell Taylor, secretary, RC Sussex Vale, UK, RID 1145, in August 2013 turned out to be a manna from heaven for over 2,000 students and teachers at five government schools in and around the city. They now have custom-built RO filtration units providing them clean drinking water.

Before taking up the RO installation projects, Taylor's club, in association with RC Baroda Metro, RID 3060, provided 30 beds for children, who were sleeping on makeshift thin mats on rugged floor, at the Adarsh Nivasi Shala VJ Kanya School. Having found a good partner club in Vadodara, he planned to install RO units in five schools — Adarsh Kanya School, Pandit Dindayal Upadhyay Prathamik Shala, Shree Patel Shivabhai Lalubhai Sarvajanic Vidyalaya, Samlaya, and two other schools in Dajipura and Desar villages — which were hit hard by water contamination. Students dropped out as there was no provision to supply clean drinking water in these institutions. "It all started with a chat over a cup of coffee Taylor had with us. And the Wheel was set rolling for humanitarian projects since then," recalled Rtn Nitin Bhate from RC Vadodara One.

Practically all students had to carry a water bottle from home because of the bad quality of bore water at the school. "As many students have to walk a long distance to reach their schools, especially those in villages, carrying a water bottle turned out to be quite tedious for them," said Taylor. While many simply stayed away from school, "those who came without carrying a water bottle



DG Pinky Patel (2018–19) along with RC Baroda Metro president Himanshu Rana (2nd row, left) and other club members.

from home had to drink the unsafe water and were taken ill. This led to a steep fall in the school attendance," he recalled.

RO installations

Over a period of seven years, Taylor and his point man Rtn Nitin Bhate took up the installations of RO units at these five government schools in a methodical manner. The sponsor, RC Sussex Vale, has invested ₹6 lakh (£6,500) that covered the entire design, installation, maintenance and filter replacements for three years, after which the Vadodara club will bear the future maintenance expenses. "We did a detailed survey of each school by talking with headmasters and teachers. Each school had at least 250–300 students. We took pictures of the school premises and shared them with our global partner," said Bhate. The RO units have different capacities based on the needs of each school. Looking back with satisfaction, Taylor said it was "fun to do such collaborative projects

and very rewarding to see the difference they have made to children's lives."

School headmasters were glad to report that the average attendance went up by 20–25 per cent after RO installations, and touched almost 30 per cent in village schools. Taylor is all praise for RC Baroda Metro for "their excellent planning and project implementation."

Sixth water project

Now, RC Sussex Vale has agreed to sponsor a similar RO installation at K H Patel Janpad Vidyamandir School, Khakharia taluk, by joining hands with RC Vadodara One. The project costing ₹1.82 lakh (£1,800) will provide clean drinking water to around 220 students and staff at this school. Technical details and costing which were worked out meticulously in the earlier successful projects would be followed with due diligence in this new RO project, assured Manisha Bhatt, president, RC Vadodara One. ■

We Have Done This Before!

We are expanding on an existing solution!


Now we take it to 30 more schools!

The Global Grant



- Global Grant Project of ~ \$40k
- Approximately \$2,000 to be raised by Rotary Clubs in District 7360
- TRF matches \$0.80 for every \$1 from the District Designated Fund (DDF).
- Checks to be sent to the Host Partners –
**Bhumika Garg – Rotary Club of Bandra Charitable Trust,
253 Shantivan CHS Ltd, New Link Road Extn, Andheri (W), Mumbai- 400053, India
bhoomi@equirusfoundation.com, +91 99207 84445**

**Nandu Desai – Rotary Club of State College,
P.O.Box 191, State College, PA 16804-0191, Pennsylvania, USA
nmdesai99@yahoo.com, +1 925.351.1074**

A young girl with dark hair, wearing a light green shirt, is shown in profile drinking from a blue plastic water bottle. The background is blurred, showing other people in a similar setting. The text is overlaid on the image in white.

Thirty Schools.....
Thousands of lives

The Project ensures that their brighter future doesn't get hampered just by the lack of something that everyone of us have the right of...

Safe Drinking Water



\$100 contribution to Rotary Annual Fund in Year 2021-2022

To District : \$47.50 from TRF for District Grants

District Grant Projects – For projects in District 7360

RAF available for District Dedicated Grants projects in July 2024 onwards

District Dedicated Grant projects: 1:1 match.

Local club contributes \$1500

District contributes \$1500 (based on club contributions to RAF 3 years prior)

Total DDG Project = Local Club Contribution + District Match

To District : \$47.50 from TRF allocated for Global Grants

Global Grant Projects – For International Projects

RAF available for Global Grants projects (min \$30k) in July 2024

International Club provides minimum 15% of total project budget

Int'l Club District and US District (from Rotary Annual Fund) is matched 80% by TRF

Additional Club cash contributions are not matched (so better to go thru TRF match)



Thank You!

Open to Questions