

Report for period April'18-June'18

Bringing the Aah! Aha! and Ha-ha factor into Education



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About Agastya International Foundation

Founded in April 1999, Agastya International Foundation (Agastya) is a charitable education trust that runs the world's largest mobile hands-on science education program for economically disadvantaged children and teachers. Through all its programs, Agastya has reached more than 10 million children and 2.50,000 teachers in 19 states in India. By making practical, hands-on science education accessible to rural government schools, Agastya aims to transform and stimulate the thinking of underprivileged children and teachers. The mission is "to spread and disseminate the spirit of **Aah! Aha! and Ha-ha.**"

- **Aah** happens through stimulating, unexpected and counterintuitive experiences.
- **Aha** is the result of questioning, investigation, experimentation and discovery.
- **Ha-ha** expresses joy in learning, reduction in fear and improvement in retention and performance

- **Mobile Labs (MLs)** or vans ferrying Agastya's teaching material – deliver its programme to the rural hinterland. These labs are attached to the nearest Science Sub-Centre and act as spokes in the eco-system. The MLs transport low-cost models, instructional material, an LCD TV and DV player and science videos, to hundreds of rural schools and homes that would otherwise have no access due to inadequate connectivity. The classes introduce students to Agastya's hands-on teaching methods.
- **Science Centre:** At the Science Centre, 100+ science experiments and models are exhibited (Chemistry, Physics, Biology, Ecology and Astronomy). Government school teachers and children visit the Centre, and are given the opportunity to interact with simple science experiments and models. Science Centres act as a resource centre and a venue for Teacher Training, Young Instructor (YI) training, Summer Camps and Science Fairs.
- **Lab in a Box (LIB)** is a unique concept designed by Agastya out of many years of experience to facilitate scale-up. Science models/experiments are organized concept-wise based on pre-designed learning modules, mapped to the school syllabus, and placed in boxes - typically ten boxes covering majority of physics, chemistry and biology concepts. These boxes are then distributed to various schools across the target geographic area and a teacher from the government school is trained to use the models and experiments for hands-on teaching in their classroom. The boxes are left with the teacher for about a week and this facilitates hands-on learning in the school over a period beyond the visit of the Mobile Science Lab to that school. Agastya follows a rotation scheme of distribution involving ten schools at a time, whereby the ten boxes in one set of LIB are available to each of the ten schools for a week in a three-month period. Agastya instructors continue to facilitate sessions, train teachers and clarify scientific concepts during the deployment of LIB throughout the program period. This program is only recommended for schools with at least 2 years of exposure to the Agastya Mobile Lab.

- ❖ **Community visits:** Community visits are held during holidays and evenings (as time permits). The team visits villages and sets up interactive models and experiments in the popular gathering spots of villages. The Agastya team imparts a sense of responsibility to parents, while motivating them to send their children to schools

- ❖ **Science fairs** and competitions help the students apply their existing abilities to new areas, as well as learn many new skills. Students improve their communication and public speaking skills as they take on the role of instructors and present experiments to their peers, teachers and visitors

- ❖ **Teacher Training Programme** aims to help teachers understand science concepts and make the classroom learning experience simpler and more engaging. To encourage teachers to promote productive student teacher interaction, participatory classroom learning environment while improving 'learning-how-to-learn' attitude, creative-thinking and problem solving skills of Govt. school children they teach Science.

- ❖ **Summer/Winter Camps** will be conducted during summer/winter vacations. Wherein workshops on arts and craft, low-cost model making and other such creative activities are held. The aim of the camps is to focus on developing children's skills and coaching them on activities that will help them to create their own models.

L&T supported program details with locations:

| L & T supported science centers | |
|--|------------------------|
| Sl. No. | Location |
| 1 | Coimbatore (Chennai) |
| 2 | Kharel (Gujarat) |
| 3 | Talasari (Maharashtra) |
| 4 | Kansbahal (Orissa) |

| L & T supported mobile science labs | |
|--|--------------------------|
| Sl. No. | Location |
| 1 | Mysore (Karnataka) |
| 2 | Coimbatore (Tamil Nadu) |
| 3 | Kanchipuram (Tamil Nadu) |
| 4 | Kansbahal (Orissa) |
| 5 | Kharel (Gujarat) |
| 6 | Hazira (Gujarat) |
| 7 | Baroda (Gujarat) |
| 8 | Ahmednagar (Maharashtra) |
| 9 | Talasari (Maharashtra) |
| 10 | Talegaon (Maharashtra) |
| 11 | Faridabad (Haryana) |
| 12 | Powai (Maharashtra) |
| 13 | Vizag (Andhra Pradesh) |

| L & T supported Lab in a Box | |
|---|------------------------|
| Sl. No. | Location |
| 1 | Talasari (Maharashtra) |

Program Highlights

Mobile Labs (MLs) & Lab in a Box (LIB):

During the quarter Programs conducted **202 school** visits achieving **28,587** student exposures and **359** Teacher exposures. The topics discussed were on Motion, Microscope, Solar system, Force, Reflection and Refraction, Lenses and Mirrors, Cell, Chemical reactions, Acid base and Salt, States of Matter, Equations, Air and Anemometer, Electricity and its components, Gravitation and effects of Gravitation, Human Body, Living World, Heredity and Evolution etc.,

Programs organised **413 community visits** which reached **10,163** Children and **6,447** adults. Where the topics discussed were on Human Torso, Astronomy, Deep Well, Earth, Periscope, Balloon Rocket, Solar system, Eclipse. Also discussed bringing awareness about Health and Hygiene, Smoking and Drinking, Superstitions and Children were taught making fun models.

We also organised **30 Summer Camps** comprising **8,055** Student exposures, **322** Teacher exposures and **224** adults. The activities conducted in the camp were making low cost models and making models by using simple materials, painting glass, paper activities like paper cap, paper flower etc. Making Air friction model, Food chain & balancing Bird. Children also got an opportunity to make models on their own. Also Explained through experiments like Eyes on nature (to develop drawing and observing skills), Magical Science (to increase curiosity level) among the participants. Also held drawing, pick & speak, pick & act competition and games like Ball & Bucket. Topic on Traffic rules and Signals were also discussed. Personality development games, Meditation, Art and Craft workshops, Motivational Activities etc. were conducted as well.

During the quarter **1 Science Fair for a day** was held at Sevilimedu, Kancheepuram comprising **309** Student exposures, **8** Teacher exposures, **23** Young Instructors and **10** visitors. Young Instructors explained approximately 30-40 models and experiments to all the students, Teachers and visitors who attended the science fair.

During the quarter we conducted **Teachers Training Program** where **642** Teachers from Army public school, Ahmednagar and Government Secondary School Navsari - Kharel were participated. Approximately 40 models like States of matter, Sound, Digestive system, Skeleton etc. were explained to the Teachers.

During the quarter MLs also conducted **Refresher Training** for Instructors and they discussed about plans, sessions and activities to be conducted in the academic year etc.

Science Centre:

During the quarter we conducted **37** School visits with **3,789** Student exposures and **47** Teacher exposures. The topics discussed were about low cost model making, States of Matter, Sound, Pressure, Laws of Motion, Plant Structure, Natural Resources etc.

During the quarter SC also conducted **42 Community visits** with **879** Children and **492** adults. The topics discussed were on low cost model making also discussed bringing awareness about Health and Hygiene, Smoking and Drinking.

Science Centre also conducted **6 Summer Camps** for **41** days comprising **1,667** Student exposures and **111** Teacher exposures. The topics discussed were on Low cost model making, Eyes on nature Experiments (to develop drawing and observing skills), Magical Science (increase curiosity level among the participants), Tod Fod Jod (Dismantling and reassembling the electronics objects used in our daily life), Theatre activities(Drama and mime), Paper activities, Plastic reuses(how to use plastic materials effectively), Personality development games etc.

During the quarter we conducted **Teachers Training Program** where **303** Teachers from Government Secondary School, Navsari. Approximately 20 models were explained to the Teachers like Cell and Microscope, sound, force and motion etc.

During the quarter, Science Centre conducted **Refresher Training** for Instructors and they discussed about plans, sessions and activities to be conducted in the academic year etc.

Quantitative Exposure data for the period April'18-June'18

| Mobile Science Lab & Lab in a Box April'18-June'18 | | | | | | | | | | | | | | | | | |
|--|--------------------------|------------|------------|-----------|--------|-----------|-----------|----------|----------|--------|-------|----------|-------------|----------|----------|-------|-------|
| Program | Activities | Ahmednagar | Coimbatore | Faridabad | Hazira | Kancheepu | Kansbahal | Kharel 1 | Kharel 2 | Mysore | Powai | Talasanr | Talasari UB | Talegaon | Vadodara | Vizag | Total |
| School visits | No.of Schools Visits | 18 | 19 | 23 | 33 | 7 | 0 | 12 | 11 | 19 | 9 | 12 | 8 | 13 | 6 | 12 | 202 |
| | No.of Students*Exposure | 2151 | 2935 | 3033 | 2091 | 716 | 0 | 1757 | 926 | 3296 | 437 | 2192 | 6010 | 927 | 393 | 1723 | 28587 |
| | No.of Teachers*Exposure | 10 | 16 | 82 | 50 | 7 | 0 | 43 | 24 | 36 | 5 | 16 | 0 | 17 | 5 | 48 | 359 |
| Community Visits | No.of Visits | 19 | 9 | 41 | 38 | 19 | 0 | 37 | 41 | 12 | 3 | 47 | 35 | 19 | 53 | 40 | 413 |
| | No.of Children | 289 | 340 | 715 | 1058 | 959 | 0 | 752 | 820 | 412 | 111 | 915 | 693 | 461 | 1475 | 1163 | 10163 |
| | No.of Adults | 86 | 443 | 391 | 839 | 48 | 0 | 366 | 528 | 414 | 0 | 519 | 364 | 238 | 346 | 1865 | 6447 |
| Summer Camps | No. of camps | 1 | 1 | 2 | 4 | 1 | 0 | 5 | 4 | 1 | 1 | 2 | 2 | 3 | 0 | 3 | 30 |
| | No. of days | 12 | 17 | 12 | 12 | 13 | 0 | 23 | 16 | 18 | 8 | 9 | 9 | 26 | 0 | 14 | 189 |
| | No.of Students*Exposure | 1535 | 485 | 230 | 346 | 303 | 0 | 1230 | 851 | 660 | 224 | 390 | 390 | 1021 | 0 | 390 | 8055 |
| | No.of Teachers*Exposure | 0 | 0 | 0 | 32 | 0 | 0 | 62 | 90 | 36 | 40 | 0 | 0 | 62 | 0 | 0 | 322 |
| | No.of visitors | 165 | 0 | 0 | 0 | 0 | 0 | 12 | 23 | 0 | 24 | 0 | 0 | 0 | 0 | 0 | 224 |
| Science fairs | No. of fairs | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | No.of days | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| | No.of Students*Exposure | 0 | 0 | 0 | 0 | 309 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 309 |
| | No.of Teachers*Exposure | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
| | No. of Young Instructors | 0 | 0 | 0 | 0 | 23 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
| Teacher Training Programme | No.of visitors | 0 | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 |
| | No. of days | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
| | No. of teachers | 36 | 0 | 0 | 0 | 0 | 0 | 303 | 303 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 642 |

| Science Centre April'18-June'18 | | | | | | |
|---------------------------------|-------------------------|------------|-----------|---------|----------|-------|
| Program | Activities | Coimbatore | Kansbahal | Khare I | Talasari | Total |
| School visits | No.of Schools Visits | 17 | 0 | 9 | 11 | 37 |
| | No.of Students*Exposure | 1711 | 0 | 868 | 1210 | 3789 |
| | No.of Teachers*Exposure | 34 | 0 | 13 | | 47 |
| Community Visits | No.of Visits | 0 | 0 | 0 | 42 | 42 |
| | No.of Children | 0 | 0 | 0 | 879 | 879 |
| | No.of Adults | 0 | 0 | 0 | 492 | 492 |
| Summer Camps | No. of camps | 1 | 0 | 3 | 2 | 6 |
| | No. of days | 15 | 0 | 16 | 10 | 41 |
| | No.of Students*Exposure | 431 | 0 | 965 | 271 | 1667 |
| | No.of Teachers*Exposure | 0 | 0 | 111 | 0 | 111 |
| Teacher Training Programme | No. of days | 0 | 0 | 4 | 0 | 4 |
| | No. of teachers | 0 | 0 | 303 | 0 | 303 |

Feedback

Students:

"We learnt about various topics such as States of matter, Equations etc. which are related to our syllabus. We also did group activities. The session was interesting and we all have enjoyed the class"

-Prajakta Sutar - Navnath Vidyalaya, Karanji

"In today's camp we learnt to make low cost models, we made some models by using paper and plastic. We liked the activities conducted in camp and had lot of fun"

-M.Shalini, Std 7th - GHS Orikka, Kancheepuram.

"We liked the games and competitions held in the camp today. They also taught us how to reuse the materials like paper and plastic by making models. The camp was very interesting and useful"

-Tejashwini , Std 8th - GHS Hanchya,Mysore.

Teachers:

"Excellent information was given to the children regarding the subject. They learnt the concept by making models. Now it is easy for them to understand and grasp subject concept easily"

-Mr. Shishir G Tandel, Science Teacher, Kharel.

"After Agastya's intervention children have become more interactive and participative. The topics were related to what we teach from the books"

-Mr.Rama K, H.M.G.V.MC.ELE.School, Vizag.

Community Members:

"Today Agastya visited our village and explain us about Human Body. The concept was very useful and informative as they explained the topic with models"

-P.Kumaresh - KSP Nagar, Kancheepuram.

"Agastya visited our community today and they taught us about Human body. They also taught the functions of our body parts and how to take care of our health"

-Dadabhau Bhoirkar, Talegaon.

Gallery

Special Programs:

International Yoga day celebration at DGSP Vidyalaya, Khare Karjune, Ahmednagar.



World Environment Day celebration at GHS Kallur Naganahalli, Mysore.



World Environment Day celebration, Coimbatore



LTPCT visit to Mysore Science Centre on 9th May.



Refresher Training for Instructors:



School visits:



Community visits:



Summer camp:





Thank You!!!