

# Reap Benefit Site Visit Report (January 2017)

## Project Summary

Reap Benefit's goal is to build the next generation of problem solvers, by involving youth in developing skills, local data and solutions to solve local environment and civic problems. Asha Stanford funds their work to partner with 10 government schools to implement their program. As part of the program, they have students identify sanitation problems in their school and engage them to build solutions for these. The project (at the time of the site visit) has partnered with more than 100 schools. Their goal is to scale their model to schools across the country.

## Site Visit Details

I (Arun Tejasvi Chaganty) visited the **Ashram government school in Chikkalasandra at 10am on Wednesday, January 5, 2017**. It was a pre-arranged site visit with project partner Kuldeep Dantewadia. The school is adjoining a private school, the Deccan International School. The government school is quite large and is composed of about 3-4 buildings and was built by the Deccan Herald (which also owns the Deccan International School), so this school is on the better end of the spectrum. The school has about 195 boys and 169 girls.

## Sanitation facilities



*Figure 1: Boy's urinal.*



*Figure 2: Area outside boy's toilet. Before the urinals were constructed, boys would urinate here leading to bad smell and poor hygiene.*

- Kuldeep first showed me the old toilet which as a single stall in the corner of the campus. Before building urinals, this single stall was insufficient for the size of the class and many students would urinate right outside. As a result, the area was quite unhygienic and smelt very bad.

- At the same time, in an adjoining plot, as a remnant from a construction camp, there was a concrete structure with stalls without any drainage system. Students would urinate here as well.



*Figure 3: New urinal structure*



Figure 4: Girls toilets.

- Finally, the girls' restroom is placed in the back alleyway — they were not usable because (a) they were not being cleaned, (b) the doors were broken and had holes in them that caused a lack of privacy.
- The first intervention was to renovate the concrete structure by installing waterless urinals here. The waterless urinals work by simply placing a table tennis ball in the drain which allows liquids to flow into the gap, but blocks odors coming out of the sewage. The urinals were jointly constructed by 8th standard children from the private school and 9th standard children about a year ago and are in good working condition.



*Figure 5: Artwork on walls leading to girls toilet helps prevent vandalism / people urinating on the wall.*

- The second intervention was to fix the girls restrooms by replacing the doors, cleaning the ventilation space and adding a hook behind the door for girls' dupattas.



Figure 6: Taps where dishes are washed. Behind the taps, a drainage pit was constructed to take the water away from this area.

- They also fixed the taps/faucets in the facility, draining the greywater to some nearby vegetation instead of having it pool in the area.

#### Maintenance

- The boys' urinals are maintained by the senior boys (in 9th standard) every evening.
- The girls' urinals are cleaned by an aiyah once a week.
- To prevent vandalism of the women's bathrooms, the private school agreed to installing a CCTV camera in the walkway, and a lightbulb was installed.

#### Facilities

- This school obviously has a lot of good facilities (e.g. pukka restrooms, the CCTV camera, also security because of the private school).
- All the schools in the Bangalore city have built restrooms, but most of them are not in working condition (or are locked up). Fixing the system is what the RB team does.

#### Talking with the principal

- I spoke with the principal about their partnership with Reap Benefit (Kuldeep was not present).
- She said that the collaboration came from the management, but she thought the facilitators, Seshi and Goutham were very nice.

- Asked what she think the students learned from the program, she said that they were given guidance on how to properly use the urinals and things like that. She said she thought they were taught very nicely.
- Asked how she made time for this course, she said that she would schedule 1 period once a month. (*context: this is for each class*).
- Asked where the students come from, she said all very near by, walking distance.
- Asked what the average income of the students was, she said most parents were either working in factories, push carts, coolies and domestic labourers; they made about 1-3L per year.
- Asked what she would do if she was given 10L to use for the school, she said she would use it to pay the students fees, buy books and uniforms. When I pressed her to think more, she said she would pay for medical facilities for the physically handicapped in her school.

### Classroom session



Figure 7: Vinod teaching the class about the local water system.

- Taught by Vinod (earlier part of Magic Bus), a fairly new (6 mo) but very dynamic recruit.
- Vinod taught pretty well and was mostly engaging.
- He could do a better job engaging the whole class, as most questions were answered by 1-2 students. A lot of students did participate when he told said students to not answer (e.g.).
- Vinod made the class engaging by having the class answer in teams, and the content was quite participatory.
- Made the strong point that they should look to each other for solutions, instead of expecting others to fix their problems.

- Asked the students to come up with project ideas; asked them to search online, which was accessible to this class because their parents had computers (as did the school).
- Had students explain why sanitation was necessary, what they should be doing.
- Students involuntarily answered about how the waterless urinals worked.
- They have iterated on the waterless urinal design to use tin sheets which are cheap but more robust. While teaching, they still have students make their own urinals with bottles and experiment with how the urinals are fixed. Students report on splashing, smell, etc. with the toilets.

### Discussion with Kuldeep

- Currently supporting about 40 schools in Bangalore, 40 in Hubli and 20 in the Darwad region.
- They have a solution team
- 3+1 facilitators that visit the schools.
- How do you get more schools to participate? Creating model schools adds peer pressure for other schools to join. They also try to get journalists to report on the schools that performed well as an incentive.
- How well do incentives work? Turns out that incentives are more used in private schools than government schools. A lot of the government schools cooperate — if they demand particular facilities (buy paint), Kuldeep says no, after 6 months, the schools approach them again (because of peer pressure?)
- What are your plans to scale?
- Currently they are looking to expand to all the schools in a block (80) and add another 100 schools in the Hubli — Darwad area. Also planning to expand into Bihar (invited by an MP there).
- Kuldeep generally feels more confident that the basic teaching model has become more modular and easier to scale. Each intervention is a module that can be added/removed.
- Currently having problems with routing money using the FCRA because of changes in government procedures — need to channel all invoices through SELCO. In the future, they are trying to get an FCRA that will help get funding from a number of corporates (including Google, Amazon).
- Have some funding from RMZ, UNDP, Deshpande Foundation
- “Solve for community” — partnering with corporates and private schools to assist them.
- **Kits:**
  - They are now on the 2nd iteration of kits. Kuldeep shared the kit handbooks and some of the earlier laser cut cardboard sheets. Some takeaways:
  - the kits have fairly clear exercises to build awareness of concrete cycles (e.g. Source Supply Use Disposal), first at a theoretical level and then practically within the school. They learn how to measure quality, measure it themselves and build their own water filtration systems.
  - The material can be made shorter or easier/clearer for teachers. The kit also needs to be made cheaper.

- **Advanced kits:** I also saw the water usage meter and the air quality monitoring meters. Both are nicely made, and have some good science lessons in them (e.g. had children measure air quality before/after Diwali).
- **Solver buses:** Like science buses, except with kits and material to help students fix their own civic problems.