



### *Turning Trash into Trees*

Vihaan Agarwal

Delhi, India

Vihaan and his little brother Nav were sitting in the back seat of the car, on their way to school. The Delhi traffic was dense, as usual, and the air outside was smoggy with exhaust fumes. The polluted air in Delhi had been a problem for Vihaan for a long time. Because he had asthma, he often wasn't allowed to go outside and play with his friends. So that day, when he opened up the newspaper, one article in particular caught his eye.

"I read an article about how India's largest landfill, the Ghazipur landfill, had collapsed and caught fire," he remembers. "It released really dangerous fumes into the atmosphere, as you can imagine." That day, for the first time, Vihaan made a connection between two problems that had always bothered him: Delhi's dismal air quality, and the huge amounts of trash generated each and every day in the city.

Delhi's 19 million people produce around 9,000 tons of solid waste every day. Most of the trash ends up in landfills, where it is neither recycled nor disposed of correctly. But since many landfills are already overflowing, a lot of trash is simply burned in the street. These trash fires release toxic fumes into the air—as do the landfills, which also burn on a regular basis. And the gigantic mountains of waste also contaminate the groundwater.

"You think about trash being soil contamination, or visual pollution," Vihaan says. "But the connection to air pollution was never there for me—until I found out that almost 20 percent of Delhi's air pollution is directly or indirectly caused by trash."

Vihaan and his brother Nav decided to first tackle the problem in their own home. They started by recording how much trash they were producing. Instead of having it collected and brought to one of the landfills, they kept it in their yard for one month. "It was a staggering amount," Vihaan says. "No one would think that in just one month you would produce that much waste."

Vihaan decided that, at the very least, he didn't want his own waste to end up in the landfill and continue to feed the fires that ultimately were making it hard for him—and everyone else—to breathe. He started by segregating it into dry and wet waste, which made it much easier to recycle later on. But then, when the trash was picked up, Vihaan saw that the workers were simply mixing all of the trash together—so his separating work had been in vain.

But he didn't give up: instead, he contacted a company that would pick up the segregated waste and make sure that it was recycled. However, once again they discovered that the company they hired to do the recycling wasn't doing it properly. So they decided to start their own organization, One Step Greener.

At first, he and his brother did the trash sorting and recycling for just their own home—but soon 20 other households were doing it too. “From 20 households, it grew to a hundred, in a matter of just two months,” Vihaan says. “We had so much waste that we had to hire a truck that went around and took the trash to a recycling facility.”

The next step for One Step Greener was to hire workers to segregate the collected trash, which was then sold to companies that use the recycled materials to produce new ones. This gives the workers the chance to have a steady income, bank accounts, and health insurance.

“Initially our goal was just to survive, and to grow the project as much as possible,” Vihaan says. But today, One Step Greener serves more than 1400 households in 14 different neighborhoods, as well as in a few schools and offices all over Delhi, and is operating in Gurugram. They have a one-of-a-kind center, where people can come and drop off their trash to be recycled. It is also their office. They recycle 99 percent of the trash they collect: this saves resources, and is much better for the environment than trash that ends up in overflowing landfills.

But from the very beginning, their work was not only about picking up trash and making sure that it is recycled. “What we’ve been able to do is not only to provide an essential service, but also set up a zero-cost process,” Vihaan explains. “We charge for the monthly pick up; and the whole rationale is that if you see the amount of trash you’re producing in a month, you will automatically reduce that waste.”

Vihaan has observed this over and over again—especially when it comes to plastic waste. When families see the mountains of plastic trash they are producing in just one month, they work hard to make sure they produce less of it in the following month.

Their model worked so well that soon their nonprofit organization was actually turning a profit. So Vihaan and Nav immediately invested the funds into a second project to help improve air quality in Delhi: planting trees. “Right in the heart of Delhi, we’ve planted an urban forest,” Vihaan says. “Our vision was to create an urban forest, a biodiversity hotspot. We’ve been maintaining it for three years now.”

Their forest covers a very small area, but it is home to a large number of species: butterflies flutter through the air, and a dozen species of birds are nesting in the trees. The biggest reward, Vihaan says, is the reaction of people who come to see the project. “I am very grateful for people’s reactions to everything we have done,” he says. “I see that people are genuinely worried about where the world is heading, and they want to do something to change it.”

There certainly is a growing environmental movement in India. At first Vihaan didn’t believe in advocacy work; but then he started attending the Fridays For Future protests in Delhi. This experience changed his mind. “It was an infectious feeling,” he says. “I felt like we were making a change—that if two or three hundred people could come together, the whole country could come together.”

As a young environmental activist, Vihaan was invited to meet the Honorable President of India, along with the First Lady and visiting dignitaries, the King and Queen of Sweden, at the President’s house. While he knew that his visit might not change any policies, he was glad that at least the president listened to him. They discussed climate change, recycling, waste management, and how young children from around the world are stepping into this domain. This visit was a testimony to Vihaan and Nav that age is not a bar. Despite the common feeling of disconnection between politicians and ordinary citizens, Vihaan feels it is possible to bridge this gap.

But first, waste needs to become a political issue—and for that to happen, people need to understand what is at stake. That is why Vihaan and Nav are using their organization’s social media channels to educate people about the importance of segregating and recycling trash.

“I think it’s really important, because we are going to grow up and live in this world,” says Nav. “Seeing the climate in this state, it’s important to fix our mistakes—and right now waste in India is not taken seriously.”

Vihaan and Nav have big plans for the future of One Step Greener. Before Vihaan heads off to college and leaves the organization in his younger brother’s hands, he wants to reach 2,000 households, and expand beyond Delhi. He also wants to plant at least another 10 urban forests.

“At the end of the day, when you do something that actually creates a difference, everyone will notice you, everyone will know you, and want to do something that is as inspiring as the things you do,” he says. And he adds, “What you’re doing might not make a difference directly, but the domino effect it creates will create huge change—even something as small as planting a tree in your backyard.”

*If you really want something, and really work hard,  
and take advantage of opportunities, and never give up, you will find a way.*

*Follow your Dreams.*

**Dr. Jane Goodall**

**Call to Action:** Segregate your trash. Produce less trash in the first place. Buy fewer packaged products. Learn more about Vihaan’s and Nav’s work at <https://www.onestepgreener.org>. Follow them on Instagram @onestep\_greener or Twitter @stepgreener or LinkedIn @vihaanagarwal

**Stone Soup Leadership Institute**  
[www.stonesoupleadership.org](http://www.stonesoupleadership.org)  
[www.soup4youngworld.com](http://www.soup4youngworld.com)