



### *Planting the Right Kind of Green*

Aadya Joshi  
Mumbai, India

Every day on her way to school, Aadya walked by the local police station in her neighborhood in Mumbai, India. In front of it there was a garbage dump that had been used by the police to store confiscated vehicles that were never reclaimed by their owners. Slowly, the locals had added their trash, creating a landfill right in the middle of Aadya's neighborhood. The cars were stacked on top of each other, some decades old, and the stench of the trash between the car wrecks would drift through the streets in the hot summer months.

"For a long time, my friends and I tried to figure out why no one was doing anything about it," says Aadya. "So in the end I went to the police commissioner and the inspector and I said okay, I can make a garden in this garbage dump if it's not being used productively."

It took another month of convincing, but ultimately the police agreed. Aadya got some friends and local residents together, and for a month they met every weekend, cleaned out the trash, removed the contaminated soil, replaced it, and moved the old cars. They even cut up some of the cars, turning them into pots for some of the plants. Then they spent another weekend planting the garden in the old garbage dump. "It turned into a community project," says Aadya. "This garbage dump had been an issue in our community for a while."

For Aadya, this urban gardening project was the spark that lit a fire. She saw the power of one community garden, so she wanted to create even more. Then, at a workshop on gardens she was inspired to become the environmental activist she is today. "Their philosophy was to plant a lot of native trees to create an urban forest," Aadya explains.

Aadya had learned about native and nonnative plants in biology class. However, she had never realized how important native plant species were to the planet's ecosystems, even in a big city like Mumbai. "What I learned in the workshop, I thought that's actually really smart," she says. "You plant things that are native because they provide more ecological stability."

Aadya embarked on a discovery process that led to the research of Dr. Doug Tallamy, a professor in the Department of Entomology and Wildlife Ecology at the University of Delaware. From him she learned how important native plants were for supporting local insects, which in turn were an important source of food for local bird species.

This reminded her of the stories her grandfather had told her about the Mumbai of his childhood. He had described trips with his family, where they would see leopards, and colorful birds in the trees. It was a very different Mumbai from the one that Aadya knows, polluted and smelly; the only birds she ever saw were pigeons and crows.

Suddenly Aadya understood why there were no more colorful birds in the trees of Mumbai: they were the wrong trees! The problem in India goes back to colonial times, Aadya explains. The British brought with them many types of trees that weren't native to the region, and they were slowly adopted by local people. But because these trees weren't from India, the local insect and bird populations couldn't feed off of them or adapt quickly enough.

"In India, but especially in Mumbai, you see a lot of these colonial, nonnative invasive plants," Aadya says. "For example, rain trees. People say they've been here for so long, they must be a vital part of our ecosystem."

But actually, rain trees are from Costa Rica, and so is the wildlife they support. Those species that can live on the rain tree simply don't exist in Mumbai.

"If you plant native plants, then the insects come back, the butterflies come back, you have caterpillars, and with them the birds come back," Aadya explains. When she read the work of Dr. Tallamy it was like a switch was turned inside her head.

"I realized that maybe planting gardens was not the right thing to do," she says. "But if I could teach people what we should be planting and why, that would be a much more valuable lesson."

So Aadya launched her new plan, and sprang into action. In a local nature park, she started offering workshops for children ages five to twelve. It was late 2019, and the beginning of her organization, The Right Green.

She tested out her workshop ideas on her little brother, and her aim was simple: teach children about the importance of native plants for local ecosystems, and make sure they have fun at the same time.

"The first part of the workshop gets them into nature, since we have a lack of open spaces here," she says. "And the second thing is that I try to teach them how native plants support insects and biodiversity, and how nonnative plants *don't* support it."

Aadya makes sure that her students have fun: she takes them around the park and lets them find trees based on different clues. When they find the trees, she asks, "What kind of tree is this? Did you notice more insects on this tree versus another? What differences do you see?"

"I get them thinking about why it is that this mango tree has so many insects, butterflies, and birds living in it, while something like a rain tree has maybe one bird resting on it, but not even nesting within it."

Aadya is happy that these workshops are having a positive impact: children are sharing their new awareness with their families while they plant their gardens at home. And adults are reaching out to her for advice about what plants they should put in their gardens.

This need for advice gave Aadya her next idea. She created a database of native plants and ranked them by the amount of biodiversity they supported. Dr. Tallamy had accumulated this kind of data for the United States, so Aadya got in touch with him to learn more about his methods. What she learned from him she used to produce a dataset on native plants in India. "What I want to create is a resource that a lot of people can use so that when they plant their gardens, they will seed well," she says.

Aadya's innovation has brought praise and support. She was awarded funding by The Pollination Project, an international organization that funds projects aimed at social change. With the money she received, Aadya printed booklets to give people in her workshops. She also produced a short animated video for social media that explains the importance of planting not just any trees, but the right ones—the "right green."

With climate change causing ever more extreme weather in India, the need for planting native trees only becomes more urgent, Aadya says. Native trees are more resilient and can adapt more easily to changing conditions than nonnative trees. And having a healthy population of plants is indispensable for the sustainability of ecosystems anywhere.

"The whole point about planting native is to reduce the damage that climate change has done," says Aadya. "There is this relationship between the plants, the insects, and the birds, and then the rest of the food chain, to help repair some of the damage."

With her workshop and her database, Aadya is educating both future generations and those making seemingly small decisions today, like what plants to put in their garden, that can have a big impact. "If we don't make a conscious effort to change, and to make the world someplace that we want to live in, then we're really not doing our duty as current and future leaders," she says.

“It’s like my dad and my grandfather always told me, if you want something to happen, you have to do it yourself. You can’t just wait for other people to have the same idea that you have.”

*Because life is fueled by the energy captured from the sun by plants,  
it will be the plants that we use in our gardens  
that determine what nature will be like in 10, 20, and 50 years from now.*

**Doug Tallamy**

**Call to Action:** Plant a garden. Learn about native plants in your community. Keep local biodiversity in mind!. Learn more about Aadya’s project at [www.therightgreen.org](http://www.therightgreen.org)

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www.stonesoupleadership.org  
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