

39. Environment

In 2017, people in India planted a million trees. For centuries, we'd taken from our environments there, without adequate replenishment, cutting wood for building and fires, clearing them for farmland, hunting out the animals, dumping wastes and poisons. Deforestation, soil desiccation and erosion were big problems in this billion-plus person nation, with mean summer heat, even before climate change.

What had been lush jungles and rich forests full of life had become ruined, dry dead dirt and thin grass. It was common for a village woman to have to walk ten miles to a water source and then ten miles back, with only the water she could carry on her head for her whole family for the day, in the baking sun, every day in the hot times, because local sources had dried up. Local ecosystems had been destroyed. Life was not sustainable in many areas, because local systems had not been sustained.

India recognized the problem and took action. Auraville, an intentional community near Pondercherry, had proven desiccated land could be brought back to life. Its land had been denuded under French rule, with forests razed and lumber exported for money, planted for agriculture a while and then neglected. Soils had baked and eroded away. Auravillians planted a million trees and restored land and ecosystems grew food and supported life. The fierce Southern India heat is so much more bearable under shade. They built a thriving, idealistic community in that newly rehabilitated ecosystem. India realized it needed to do much more of that, so it organized an effort that planted a million trees in one year.

The next year, they did it again, and the next year, again. Now, in 2060, they've planted 1 billion trees, that people have cared for, watered and loved. The difference is amazing. Forests are taking hold again, making water in dew and pulling it from below the surface. Streams are running. Animal life is healthy. People are far more comfortable under shade, eating much more fruit and drinking more coconuts. Trees are working as air filters, pulling carbon from the atmosphere and sequestering it in the ground. Now that fossil fuels are no longer burned, and after massive global reductions in industrial emissions, the air and waters are clean, and people are healthier. Soils are alive and producing good foods locally.

Other nations have followed India's good example. A billion trees have been planted all over Africa and the Middle East, a billion in South America, a billion in North America, a billion in Australia/New Zealand. Altogether, more than 10 billion trees have been planted and cultivated around the world, since 2017.

More impactful even than that, we have radically reduced clearing of forests, globally. Some genius figured out one of the best ways to positively affect global climate change was to simply stop cutting down old-growth forests for things like toilet paper and packaging. They are already fully grown and hard at work pulling carbon from the air and burying it in the ground. Billions of living beings depend on their ecosystems. We use hemp to make paper now, the world's most efficient fiber producing plant, instead of pulp wood. People cook with cheap electricity produced by solar and wind, rather than fires. Bamboo has taken off as a radically renewable building material, replacing wood for many things. (Some bamboo grows 4 inches a day!) Lots of new construction is 3-D printed, rather than using wood. It was a simple no-brainer to stop cutting down mature forests to combat global climate change.

Radical changes in city layouts, structures, operations, infrastructure and technologies have had huge positive environmental impacts. As much as two-thirds of paved areas in cities have been replaced with delivery, walking and biking paths, trees and gardens. That restored soils and cut temperatures in cities,

where trees and plants filter the air, which is far cleaner without fossil fuel burning and private vehicles, and with green energy production. Infrastructure upgrades have much improved water reuse in cities, allowing many to take only half as much water as before from natural systems, with enormous benefits to natural environments served by river systems. Mano Lake in California is up 25 feet from 2020 levels, and fish run on rivers that haven't seen fish runs in more than 100 years. Stormwater runoffs are lower.

75% of the world's coral reefs died between 2020 and 2030. However, great progress has been made reestablishing adapted species of coral and stimulating their rapid growth through electrical stimuli, something pioneered in Bally, Indonesia. Reef ecosystems are coming back, if slowly. In 2036, there was a global 5-year moratorium on commercial fishing, to let fish populations regenerate after being decimated by decades of overfishing. A U.S. billionaire paid to clean up the plastics and garbage in the Pacific gyres, which took more than a decade and was completed in 2038. A 2032 global ban on most plastics and tremendous reductions in wastes mean fewer plastics and other wastes entering oceans.

In 2033, UNEC nations agreed to stop producing harmful noises underwater, which militaries had done, harming marine life. Around the world, dumping waste and poisons into oceans almost ceased by 2034. The end of fossil fuel burning and most industrial pollution radically reduced harmful impacts to oceans through acid and other poisonous rains, releases and runoffs. Radical reductions in chemical fertilizers and industrial and municipal water waste and runoff have radically reduced poisons running into rivers, lakes and oceans. Individually, the changes are small; together, these changes are vast. Now, in 2060, rivers, lakes and oceans are about as healthy as they were in 1950, and water life is flourishing again.

Since 2020, the amount of land dedicated to parks and wilderness globally has quadrupled, and wildlife populations are being restored in those environments. Approximately a third of dams in the U.S. were torn down rather than replaced as they reached the ends of their useful lives and became dangerous. We didn't need the electricity, because we get it cheaper from sun, wind, geothermal and other sources. Storing water wasn't as important as we stopped wasting as much. Those river systems have exploded with growth and wildlife. We stopped oil drilling, everywhere, eliminating awful environmental impacts. There has been no atomic energy production or waste since the last plant closed in 2033; there have been no new nuclear weapons or testing since 2031; and most nuclear weapons have been destroyed, so there's been little new radioactive waste anywhere, since 2033, and we finally buried the old waste.

We've cut light pollution by 65% globally, letting life witness the glories of heaven and night and thrive. Noise pollution has been reduced by 65% globally, reducing widespread harms we'd barely recognized. Global climate change has been reversed, after we went to the 1.5° C tipping point of irreversible harm, and clawed our way back from that, slowly at first, and then faster and faster. Extinctions of life, which had been rapidly accelerating and threatened the elimination of over 1 million species, have slowed. Humans destroyed thousands of species of life, much of which we did not even know, but we stopped. We respect and try to honor, support and learn from all life now, not just life we seek beyond Earth.

These changes are largely attributed to changes in our principles and values. People of the world generally respect and appreciate nature, natural systems, life and being present in thriving nature now. We create flourishing gardens where we live. We have pledged to end our negative impacts on our environments and natural systems, shaken awake by recognition of the harm we were doing and witnessing in global warming. We are generally motivated now to create and maintain sustainability in all of our systems and activities. Thank you to indigenous cultures all over Earth for teaching us that! We endeavor to be good citizens and stewards of the life supporting natural systems of Earth.