

Grand Prize Winner

Unleashing Nature's Magic

By Naomi Iris Dolatre, aged 18 (Philippines)

In the heart of our community lies a silent ally. Nature, with its ecosystems and boundless resources, stands as the unsung hero in our quest to achieve the United Nations Sustainable Development Goals (SDGs). As we face global challenges, we discover how the whispers of the wind, the rustle of leaves, and the rays of the sun can lead us towards a more sustainable and harmonious future.

The Dance of Solar Panels. Picture this – rooftops decorated with solar panels, harnessing the sun's energy in a systematic manner. Nature presents us with an effective solution to SDG 7 (Clean Energy). Through harnessing energy not just from the celestial source but also the power of air and water in windmills and hydropower, our community has the potential to significantly reduce its carbon footprint, progressing towards a more sustainable and renewable energy.

Biodiversity: A Symphony of Life. Enter our community's thriving ecosystem where plant and animal life blend in a balanced interaction. The commitment to preserving and enriching our biodiversity extends beyond safeguarding endangered species. It involves creating resilient and healthy homes for all lives on land and below water (SDG 14 & 15). Our community becomes a living testament through proper waste managements, clean up drives, and tree plantings.

Seedlings of Change. In the heart of our town, gardens thrive with food and potential, where sustainable agriculture is a way of life. Nature plays a pivotal role in addressing SDG 2: Zero Hunger. As a community, we can reimagine our approach to agriculture from regenerative farming techniques to promoting biodiversity in our local landscapes, we can ensure food security for generations to come.

Rivers of Renewal. Downstream, where the river's flow brings clear waters from the mountains, we find a solution to SDG 6 (Clean Water and Sanitation). Nature teaches us the lesson of valuing and protecting our water sources. Through the preservation, filters, and dams of rivers, lakes, and aquifers, we ensure the continuity of a sustainable water legacy for future generations.

Well-being in the Whispering Woods. A stroll through the enchanting woods, where sunlight filters through emerald canopies and birds serenade the day, reveals nature's role in promoting health and well-being (SDG 3). Exposure to natural environments has been linked to reduced stress levels, improved mood, and enhanced cognitive function. Outdoor activities and fresh air intake contribute to physical fitness. Nature serves as a respite from modern life, helping individuals unwind and alleviate mental fatigue. Biodiversity in natural settings provides therapeutic effects for a balanced state of health. The connection between humans and nature emphasizes its significant approach to well-being.

Roots of Knowledge and Advocacy. Beneath the shade of ancient trees, nature is the timeless teacher, instilling knowledge and a sense of responsibility (SDG 4). As students, we are not merely audiences to our community's development. We are the storytellers, the creators of change. By recognizing the symbiotic relationship between nature and the SDGs, we unlock the door to a future where our community thrives in harmony with the environment. We become advocates, spreading the mission of sustainable living, nurturing a community that cares for its planet. As we unlock the secrets held within the branches and rivers of our community, we realize that nature is more than a background— it is an active participant in our journey towards the UN SDGs. With each breeze that carries whispers

of change and each sunrise that promises a greener tomorrow, our community takes a step closer to a sustainable, flourishing future. In nature's embrace, we find not only solutions but a source of inspiration towards a harmonious coexistence with the world around us

2nd Prize

Rafters to Rooftops: Implementing Biomimicry in Urban Cities

By Hiyaa Rathod, aged 17 (India)

“Papa, what are those for?” My seven-year-old pointed to the system of ropes lacing between the rafters of the living room. “When the river floods, they tie up the furniture”, he answered nonchalantly. It was only the first week of my six-month stay at my father's home village in India, and I was already surprised by this delicate dance between humans and nature that I never noticed in the suburbs of Seattle.

While it's obvious in my father's town, I realise this truth is global: we are only guests in our environment, at the mercy of climates and ecosystems, plate tectonics, and tidal patterns. Whether it is bold arrogance or simple-minded naivete, there is a certain belief among us that we have conquered the wild outdoors, as if Mother Nature herself is held on a leash.

Recent attempts to live symbiotically with our surroundings, integrating principles like daylighting and natural cooling into construction, fascinate me. Since I was seven, my dreams have brimmed with visions of self-sustaining floating cities and rooftop gardens, envisioning communities coexisting harmoniously with nature.

In Tokyo, a train snakes through the cityscape, its design inspired by a Kingfisher's beak. Solar-panel-clad skyscrapers draw inspiration from the way leaves capture sunlight, channelling this energy to power homes and businesses. The concept of Biomimicry is about getting inspired from the natural world to build resilient and sustainable cities. If imitation is the greatest form of flattery, it's time we learn from nature.

By applying biomimicry principles to urban planning, the UN SDG 11: Sustainable Cities and Communities can be addressed. Our future will look more like city layouts mimicking the organisation of natural ecosystems, promoting efficient resource distribution. City structures function like beehives and ant colonies, optimising traffic flow and resource utilisation.

Drawing from the resilience of plant life is how the urban heat island effect is mitigated, where green roofs and vertical gardens enhance energy efficiency. Skyscrapers are adorned with cascading gardens. Adaptive features of animal skin inspire building façades. Buildings with façades dynamically adjusting, akin to the fur of animals adapting to temperature changes, become a reality.

There are no quick technical fixes to solve the climate emergency and our over-exploitation of natural resources. Inspired by Nature, guided by Biomimicry, I reimagine our cities as living organisms, breathing, adapting, and flourishing in harmony with the world that hosts us.

The concrete jungles of today yearn for a touch of green, and biomimicry emerges as a creative response. Inspired by Nature, principles of Biomimicry will allow us to restore natural and semi-natural ecosystems; sustainable management of aquatic systems and working lands; and integrate nature in and around our cities.

The delicate dance between humans and nature, once noticed in my father's living room, is what I envision the world to be. The delicate dance between humans and nature, witnessed in my father's village, expands its scope globally. It becomes a testament to the potential inherent in embracing the wisdom of the natural world and fostering sustainable cities. Biomimicry emerges as a transformative force, allowing the 7-year-old me to not only dream of self-sustaining floating cities but the 17 year old me to build them.

3rd Prize

How can nature help us achieve the UN SDGs in my community?

By Bryan Bereczki, aged 14 (Hungary)

My hometown Tiszacsege is a tiny town with a thousand-year history. This area is the largest grassland in Central Europe giving home to farming, cattle, and unbelievably beautiful wildlife. When I step out of the house I can hear the birds chirping and see them fly by, I see the deer on the fields and the rabbits as they jump around. I live on the doorstep of the oldest National Park in Hungary next to the river Tisza. I am lucky. I am lucky to breathe fresh air every day. I sit in my backyard and admire the dazzling fauna up close. I daydream of a perfect world but the reality is different, reality is harsh.

A local community is successfully restoring natural assets, heritage, and important traditions. They have renovated old buildings and planted native trees and wildflowers. They brought back dance houses and other events into the community while ensuring that these cultural traditions were historically correct through research. They have created a Baby Tree program which means after every baby is born in town we plant a tree. Now, that doesn't mean that there aren't any challenges or anything else to be done. Saving our environment is more important than ever.

The goal of the UN SDG was set for 2030, which means we have very little time to act. I am truly inspired by my town's community so I have set a goal for my school community. My aim for the next 6 years is to restore the school's garden to its former glory because I believe we must help nature before it can help us achieve the UN SDG.

I recognize the potential of the school to become a super green environment. However, a school that was blooming years ago has much to be improved. I can tell where trees were standing before they were cut down. I see traces of a kitchen garden and flower beds that students and their teachers once looked after. Human negligence and greed are the biggest enemies of nature.

Even though fewer than 400 students are attending, the area of the school is rather large, approximately 2318 m². We have better buildings, sports halls, and equipment than most schools on Earth. I propose to use what we have and make good use of it. Vegetating the greenhouses instead of using them as storage is a great step forward to help restore the kitchen garden. Since we have plenty of space in our classrooms, we can start to grow seedlings in the autumn, and then transport them into their location in the spring when the weather's warmer. This can help the students learn and observe the process of growing. It is essential to know how to live with nature. Restoring the herb garden would be another step to preserving the plot. Herbs can be dried, and then processed during biology classes. Bird feeders, nest boxes, bug hotels, and bee hives can be made from scrap wood in the school's woodworking workshop. Displaying them in an interactive pathway and letting wildlife take over is the progressive approach. Cultivating native trees, flowers, bushes, fruit trees, and vegetables would be a great health benefit to us all.

In my opinion, the mentioned changes would help children's mental and physical health too. It is vital to enable rewilding and restoring areas to their uncultivated states. I strongly believe that I am able to bring my ideas alive with the help of my fellow students and our teachers. Making the school more eco-friendly than ever before.

4th Prize

How can nature help us achieve the UN SDGs in my community?

By Daniel Mugabo, aged 14 (Kenya)

As the world population continues to grow, there is a sudden increase in demand for clean water and sanitation, and solving it seems impossible to many, saying we are going to solve the problem by going with nature-based solutions sounds almost absurd. Growing up in Kenya, my family and I struggled with the atrocious smell of sewage in our village due to poor sanitation, and we as kids would always end up in hospitals due to excruciating stomach aches. When it came to our homes, soaps were rare items, and accessing clean water was even more challenging, as the water we used for our everyday use came from a polluted river two km from our home. Our washroom included bushes and the use of leaves or papers. As we continued to grow up, our parents started construction of washrooms and making local soap, that wasn't the best but that's what they could afford. Eventually, I came to the realization that 2.2 billion people around the world do not have safely managed drinking water services, 4.2 billion people do not have safely managed sanitation services, and 3 billion lack basic handwashing facilities (WHO.int, 18 June 2019), just like us.

I was seated under a tree wondering how nature can help us achieve proper sanitation and access clean water after reading the essay competition from TSL, and when I went on asking my friends for their opinions, they said I was going mad, claiming that we are the ones in charge of looking after nature not nature looking after us. Nature can be a hub of solutions if we pay close attention and observe. I decided to conduct my research and find out how Nature can offer a solution to the problem shared by my family and 4.4 billion people. What can we do? Nature doesn't hurry yet everything is accomplished (Lao Tzu), the best thing I could do at the time was wait, but I decided to go deep into how nature can help us solve this ISSUE. A lot of NBS came up during my research.

Firstly, the Construction of Wetlands is an example of NBS, for pollution control and securing water supply ensuring clean water for people like my family and me who got water from polluted rivers and other sources. Secondly, integrating nature-based sanitation systems such as the usage of ecological Toilets to harness natural processes for treating human waste, ensuring cleanliness. Thirdly, promoting agroecological practices that prioritize sustainable water use, such as rain-fed agriculture and precision irrigation. This method can restore and improve soil health and fertility and thus boost food production, (wedocs.unep.org). Additionally, Riparian buffers along water bodies will prevent soil erosion, filter pollutants, and provide habitat for wildlife, ensuring cleaner water and a healthier environment. Furthermore, reforestation efforts can protect watersheds and ensure freshwater availability by regulating rainfall patterns.

Nature-based solutions are not about incorporating technology but mimicking what nature does and embracing it, to achieve sustainable living for my family and 4.2 billion other people around the globe. Nature-based solutions aren't just about technology, they're about rediscovering our connection to the earth, about understanding the subtle language of wind and rain. They're about communities joining hands with trees, learning the ancient rhythms of water, and weaving a tapestry of resilience onto the parched canvas of the land. It's not just about accomplishing SDG goal number 6, it is about caring about my health while caring for you and caring for our mother nature. #GO NATURE STYLE

Joint 5th Prize

How can nature help us achieve the UN SDGs in my community?

By Bao Chau Ngoc Pham, aged 12 (Vietnam)

How can our lives be improved? Razing forests to obtain vast amounts of resources and commodities, constructing massive factories to manufacture goods to meet our rising standards of living, ... Truthfully, these actions do help us achieve what we want, but are the benefits we receive worth sacrificing nature for? By doing this, we are also constantly damaging the forestry, simultaneously increasing fossil fuel usage and carbon emissions in the atmosphere, and other damages to the ecosystem. Nature, being home to varied components of life could be the key for human life development. We should start working with nature instead of working against it. A way we can achieve that is by adopting nature-based solutions. When ecosystems are well managed and kept, we get benefits in return. For instance, preserved mangrove forests provide protection for fish from predators and even nearby homes from storms. Seems like a fair trade, right? Using these methods can create more eco-friendly and conserving operations whilst also focusing on maintaining and improving the ecosystem's health and sustainability.

Agroforestry is defined as the system of planting trees, shrubs or herbaceous plants in between or around crops, agriculture or both. Admittedly, this solution won't cover all seventeen development goals that are put out, but I believe it would make a significant impact on some. From my personal standpoint, agroforestry is able to target and benefit three main goals, consisting of the twelve goal (responsible consumption and production), thirteenth goal (climate action), and fifteenth goal (life on land).

Given that climate change is significantly increased throughout greenhouse gas emissions, which is the result of mass carbon emissions, deforestation, power generation by fossil fuels, and others, agroforestry can achieve climate change mitigation in a few ways. We can successfully accomplish sequestered carbon in soil and biomass and reduced equipment usage and runs in fields. As a result, we can achieve reduced net greenhouse gasses and fossil fuel usage. Other than benefiting the atmosphere and reducing carbon emissions, agroforestry can benefit crops and animals in various ways. Trees that are grown near crops or agriculture can utilize their large roots in order to take and absorb nutrients from deeper levels as well as preventing water leakage or runoff. Hence, leakage of fertilizer or manure is prevented and erosion rates are significantly reduced. The trees grown can serve as canopies that are windbreaks and can lower evaporation of surrounding vegetation as well as shelter for increasing animal welfare. They can also create biodiversity along with biological pest control by attracting birds that feed on caterpillars. Agroforestry can also diversify a farmer's income source and can provide other resources like fodder for livestock, firewood or timber without it being prioritized by the farmer.

In my country, Vietnam, agroforestry is one of the traditional farming practices, varying in forms, plant components and species to fit the diverse terrain, climate conditions as well as preference of the farmers and locals. Due to fluctuating prices of agroforestry products, farmers, the local government, business sector, researchers and other relevant sectors are recommended to work together

Joint 5th Prize

How can nature help us achieve the UN SDGs in my community?

By Theodore Miers, aged 16 (UK)

The area in which I live in is the Scottish Borders, and I perceive my community to be the general area of the borders, both on the English side of Northumberland and on the Scottish side. Many of the UN's sustainable development goals are already at a very good level in my community relative to the rest of the world, for example, good health and wellbeing, gender equality and clean water and sanitation to name but a few. However there are still goals to be completed and focused on, and I believe that nature can help us to achieve these goals by boosting economic growth through the utilization of eco-tourism, sustainable and innovative development.

The most prominent way in which my community can use nature to help achieve the UN SDGs is by playing to the strength of the nature around us: natural beauty. My community of the borders is home to some of the most illustrious landscapes of green hills and heathery planes in all of Britain. In order to help achieve the goals of eradicating poverty and increasing decent work and economic growth in my community, the most promising objective would be to transform the borders into a sustained haven of natural beauty for the purpose of attracting a large number of eco-tourists. This would also mean that people in my community would be incentivised to sustain and look after nature in order to maintain these eco-tourists, who would travel to the area for the natural beauty. The eco-tourists would bring about an increase of demand for local goods and services such as hotels, shops, and tourist attractions, which are most prominent in my community anyway due it being a rural community (the largest employer is a subbranch of the service sector that is compatible with tourism such as shops, hotels, restaurants etc.). This influx of economic activity, brought about from the use of my community's natural beauty, would create jobs, and stimulate the local economy to truly eradicate any forms of poverty in the area.

This idea would also lead onto the completion of building resilient infrastructure and boosting sustainable industrialization and innovation. This is because people would be looking not to ruin the natural beauty of my community for fear of losing the huge sector of eco-tourism when building new projects. Instead they would have to push the boundaries of sustainable innovation in order to achieve the maintaining of natural beauty and the utilisation of new technologies in an eco-friendly, harmonious way. If new, creative technology were to be invented because of the utilisation of my community's natural beauty as a hub for eco-tourism, then goals 11, 13, 14 and 15 would be readily completed. This would be as part of a positive and sustainable chain of development as well as the desire to maintain the whole perception that my community would have: and area of natural beauty and sustainable practices.

In conclusion, one way to use nature to help achieve the UN's SDGS would be to create an economic incentive to practice sustainable development and actions in the form of eco-tourism. However, nature can only be used to a limited extent in order to achieve all 17 goals. The most important way in which we can achieve these crucially important objectives would be to come together as not only a community, but as a planet. Only via co-operation and education can we be truly free of a looming issue which seems to be ignored frequently by many world leaders and their political objectives.