

The Green GUARDIAN

(February 2025)

Leading the Charge for a Sustainable Future

Long ago, nature thrived in perfect harmony—pristine rivers flowed, skies remained clear, and ecosystems flourished. However, humanity's relentless drive for industrialization and urban expansion has pushed our planet to the brink. Pollution chokes our cities, plastic inundates our oceans, and biodiversity is in crisis. The world stands at a crossroads.

Dr. Haleema Sadia, a visionary educator and sustainability advocate, took decisive action. In October 2024, she successfully led a landmark Sustainability and SDG Conference in Dubai, bringing together global experts and changemakers. More than just a forum for discussion, the event ignited a movement—giving rise to the Eco Visionaries Global Group, a pioneering Sustainability Think Tank.

Since its formation, the Group has been meeting regularly every week, launching the first edition of the vibrant Newsletter on 8 February 2025, and embarking on the first programme of the Green Lifestyle Challenge. Meanwhile, the Group's members have diligently implemented numerous initiatives via the Green Ambassadors in their respective countries.

Meet the Core Team

- Nara Subramaniam (Malaysia) – Chairperson, Sustainability & CSR Strategist
- Dr. Haleema Sadia (UAE) – Founder & Director of Operations
- Dr. Chinnu Palanivelu (Singapore) – Vice Chairperson, Green Economy Specialist
- Dr. B. Ramanathan (Singapore) – General Secretary, Educator & Researcher
- Narendra Singh (India) – Director of Marketing, Environmental Policy Advocate
- Nazar Danish (USA) – Green Ambassador, E-waste Management Expert
- Cdr. Vijay Kumar (India) – Climate Change Educator & Researcher

Our Green Ambassadors

- Zarina Khan (Principal)
- Anita khosla (Academic Advisor)
- Ms. Hina Mudgal (BSC ,MSC,[ENTOMOLOGY],MSC [ENVI Sc] BeD ,Subject Expert CBSE, Food Production , PGT BIOLOGY)
- Dr. N Parthasarathy (Ph.D)
- Dr. Mohammad Athar (Assistant Professor & Founder Member (M.Sc, PhD))
- Ajay Kumar Singh (M.A, B.ED/ Principal)
- Nazar Danish (Director / Green Ambassador)

Eco- Visionaries Global Group



Dr. Pratha Nittala
Chief Editor



Dr. Haleema Sadia
Editor



Ms. Hina Iqbal
Teacher Editor



Shiza Fatima Siddiqui
Student Editor (Class 10)
Abu Dhabi Indian School



Mr. Nara Subramaniam
Chief Advisor



Cdr. Vijay Kumar
Chief Advisor

Our Vision

To create a world where sustainability is a universal way of life, inspiring individuals and organizations to protect and preserve our planet.

Our Mission

To drive meaningful, lasting change through education, collaboration, and innovation—aligning our initiatives with the United Nations Sustainable Development Goals (SDGs) to build a greener, more resilient future.

The Eco Visionaries group is committed to exploring and defining focus areas for sustainable solutions, engaging with the community and relevant authorities for policy advocacy, and translating expert discussions to practical actions to empower our future generations.

Join Us. Act Now. Make a Difference

The future of our planet depends on the actions we take today. Become a member of the **Eco Visionaries Global Group** and help shape a sustainable tomorrow.

Learn More

Watch Our Story

(<https://edufam.ae/eco-visionaries-group/>)

Eco Visionaries



Eco Visionaries Global Group is more than just an organization—it is a MOVEMENT, a commitment, and a pledge to future generations. It stands as a **beacon of hope**, proving that the fight for a cleaner, greener world is far from over. **United in purpose**, we have embarked on a transformative journey to **restore the planet's blue skies and secure a sustainable future for all.**

Contributed by Dr. Haleema Sadia

Editorial

A Greener Tomorrow Begins Today

Welcome to the second edition of The Green Guardian, where we continue our mission to inspire, inform, and ignite action toward a more sustainable and eco-conscious world. As the environmental challenges we face grow more pressing, so too does our responsibility to seek solutions, embrace sustainable lifestyles, and advocate for policies that protect our planet.

Sustainable green living is our commitment to the younger generation, who deserve a better living planet from us. The choices we make today will determine the health of our ecosystems, the stability of our climate, and the legacy we leave for future generations. From reducing waste and conserving energy to supporting ethical brands and reimagining urban spaces, every effort counts.

In this edition, we explore innovative strategies for integrating sustainability into daily life. We highlight real - world examples of individuals and communities pioneering green initiatives, proving that meaningful change starts at the grassroots level. You'll also find expert insights on renewable energy, eco - friendly consumer habits, and the latest advancements in environmental science.

But awareness alone is not enough. Action is the key. Whether it's making small yet impactful changes in our homes, advocating for greener policies, or supporting local sustainability projects, we all have a role to play in shaping a healthier planet. Together, we can transform awareness into action and challenges into opportunities.

Let's move forward with purpose. Let's build a greener tomorrow, starting today.

The Green Guardian Team

(Contributed by Dr. Parthasarathy)

Featured Article

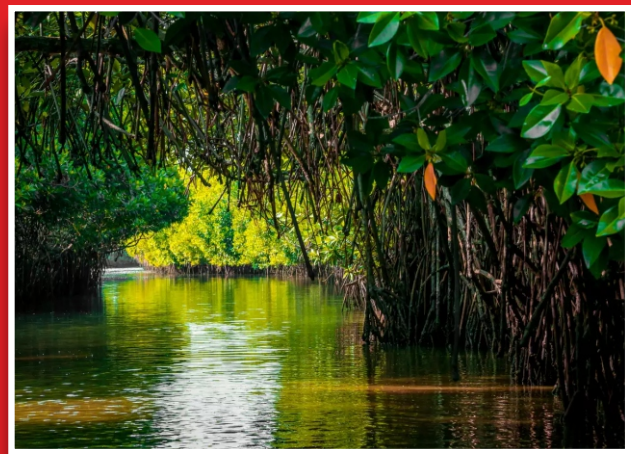
Mangroves – A Necessity for Sustainability

Mangroves, the unique coastal ecosystems found in tropical and subtropical regions, play a crucial role in maintaining ecological balance and sustainability. These salt-tolerant trees act as a natural shield against coastal erosion, storm surges, and rising sea levels, protecting both marine ecosystems and human settlement.

One of the key contributions of mangroves is their ability to absorb and store vast amounts of carbon dioxide, making them a powerful ally in the fight against climate change. Their dense root systems trap sediments, improve water quality, and provide breeding grounds for diverse marine species, supporting fisheries and local livelihoods.

Mangroves also provide food, fuel, and medicine for many coastal communities. However, deforestation, pollution, and urban expansion threaten these ecosystems. The destruction and loss of mangroves not only endanger biodiversity but also weaken natural defences against climate-related disasters.

To ensure a sustainable future, targeted conservation efforts such as afforestation, sustainable tourism, and strong environmental policies must be enforced. Collaboration among governments, environmentalists, and local communities is essential to restore degraded mangrove forests and raise awareness of their immense benefits. By protecting mangroves, we not only safeguard biodiversity and climate resilience but also secure the livelihoods of millions who depend on these irreplaceable ecosystems.



Contributed by Dr. Parthasarathy

Sustainable Living Tips

- Carry a Reusable Bottle & Bag** – Say no to plastic and always keep a reusable water bottle and shopping bag with you.
- Turn Off Unused Lights & Devices** – Save energy by switching off lights, fans, and electronics when not in use.
- Opt for Refillable Products** – Use refillable shampoo, soap, and cleaning products to reduce plastic waste.
- Eat More Plant-Based Meals** – Even one vegetarian meal a day can lower your carbon footprint.
- Reduce Food Waste** – Plan your meals, store leftovers properly, and compost food scraps.
- Use Public Transport or Carpool** – Reduce fuel consumption by using buses, trains, cycling, or sharing rides.
- Say No to Fast Fashion** – Buy quality, sustainable clothing or opt for thrift stores.
- Limit Paper Use** – Go digital whenever possible; use e-tickets, e-receipts, and online notes.
- Save Water** – Fix leaks, take shorter showers, and turn off the tap while brushing your teeth.
- Support Local & Sustainable Brands** – Choose eco-friendly products and businesses that care for the planet.

Every small step counts—let's build a greener future together!

Contributed by Dr. Haleema Sadia

My Green Garden Story



My kitchen garden was a step toward growing pesticide-free vegetables and greens — a small but meaningful change for a healthier lifestyle.

It was a regular day when I visited the local vegetable market after a long, tiring day at work. Stuck in traffic and feeling the stress of the day, a thought struck me:

Why don't I start my own kitchen garden?

Not only would it provide fresh, organic produce, but I could also recycle my organic waste to create green compost and nourish my plants. This would allow me to regulate my vegetable purchases, avoid harmful chemicals and toxins, and embrace a more sustainable way of living.

With that thought in mind, I started gardening in a small corner of my balcony. It became my mission to restore oxygen-producing plants in my surroundings. Soon, I was growing my own herbs and vegetables, while also spreading awareness about sustainable practices.

Steps to Green Gardening

- **Plan:** Choose drought-tolerant plants and design a water-efficient layout.
- **Soil:** Use organic compost and mulch to enrich the soil and retain moisture.
- **Water:** Install rain barrels and use drip irrigation to conserve water.
- **Maintain:** Opt for natural pest control methods and manually remove weeds.
- **Recycle:** Compost food waste and repurpose materials for garden décor.

By growing vegetables and greens at home, we **reduce exposure to pesticides and chemicals** while making a meaningful contribution to sustainability.

The Benefits of Green Gardening

Encourages community involvement: fosters collaboration and knowledge sharing

Supports environmental conservation: reduces carbon footprint and promotes biodiversity.

Enhances well-being: gardening is therapeutic and helps relieve stress.

Improves air quality: plants help purify the air and reduce harmful pollutants.

Green gardening can be practiced indoors or outdoors, whether in a balcony garden, kitchen garden, or backyard space. No matter how small, every effort counts toward building a sustainable and eco-friendly future.

It adds to therapeutic value and improves the air quality and reduces harmful pollutants .



Ms Hina Iqbal

Environmental Protection volunteer



Your Voice Matters



Syed Atif Ali, a seasoned sustainability and ESG expert with **27+ years of experience**, leads key initiatives at Dubai Chambers, including ESG Label and Circular Economy Incubator. He has organized **100+ events**, contributed to research, and served on international and local committees.

Sustainability, for me, is a conscious choice made by the businesses to minimize their negative impact on society and the environment while maximizing their positive impact through actions such as community development, sustainable sourcing and reducing emissions. It should be part of their DNA, driven by their leadership to implement sustainable practices. In general, we humans need to refresh our bond with the planet and understand how our actions have impacted the climate and biodiversity. Some small changes in our habits, like reducing food waste or avoiding overconsumption of natural resources, can make a big difference. We also need to teach responsible behavior to our children, so they grow into responsible citizens and leaders of tomorrow.

Eco Pulse



Thought provoking insights on Sustainability, SDGs & ESG

Mr. Nara Subramaniam recently met with Mr. Muhammad Iqbal Noorul Huq, the Environmental Director at Sulomas Sdn Bhd, to engage him in a discussion on SDGs, ESG, and all things related to Sustainability. Mr. Iqbal provided valuable insights on his perspectives on sustainability initiatives considering his 35 years of experience in business development and strategic marketing across various green industries—including bioplastics.

This is a summary of the discussion, highlighting 10 thought-provoking questions

1. The Role of SDGs and ESG in Business: How can businesses effectively integrate SDGs and ESG principles into their operations while maintaining profitability and competitiveness?

My opinion is that sustainability should not be viewed as a cost but as a competitive advantage. Businesses can integrate SDGs and ESG by optimising resources, adopting responsible sourcing, and continuously innovating sustainable products. A strong ESG strategy enhances brand reputation, attracts responsible investors, and builds long-term resilience. Renewable energy, ethical sourcing, and waste reduction as key business drivers.

2. Aligning with the SDGs: Which SDGs should industries prioritise to achieve meaningful environmental and social impact?

While they are all equally important, there is presently a dire need for industries to focus on SDG 12 (Responsible Consumption & Production) by reducing waste and emissions, SDG 7 (Affordable & Clean Energy) by transitioning to renewables, and SDG 13 (Climate Action) by adopting carbon-neutral strategies. These three SDGs have a direct impact on sustainability across all sectors. For instance, Patagonia prioritises responsible production and supply chain transparency to reduce environmental impact while inspiring industry-wide change.



3. Plastic Upcycling & Circular Economy: What are the most promising innovations in plastic upcycling today, and how can companies scale these solutions for long-term sustainability?

This aspect is close to my heart. Chemical recycling and bio-based plastics are game changers in plastic upcycling. Companies can scale these innovations by investing in better material sorting infrastructure, collaborating with technology partners, and engaging in extended producer responsibility (EPR) programs to create closed-loop recycling systems. You may have heard of Adidas who launched shoes made entirely from ocean plastic waste, proving that upcycling can be both scalable and profitable.

4. Advancing Pyrolysis Technology: How can pyrolysis contribute to solving the plastic waste crisis, and what are the biggest barriers to its widespread adoption?

Pyrolysis converts non-recyclable plastics into usable fuel or raw materials, thus reducing landfill waste. However, high energy requirements, inconsistent feedstock quality, and regulatory hurdles limit its scalability. Government incentives and improvements in pyrolysis efficiency can accelerate adoption. Neste, a Finnish company, has implemented pyrolysis to create sustainable aviation fuel, demonstrating its potential.

5. Cross-Industry Learnings: Having worked across multiple industries, what key sustainability lessons can different sectors learn from one another?

The manufacturing sector can learn from tech industries' innovation agility, while agriculture can adopt circular economy principles from the waste management sector. Cross-industry collaboration fosters holistic solutions, such as using biowaste for energy production or repurposing industrial by-products. Meanwhile, the agriculture sector's use of regenerative farming techniques can be applied to textile production to create more sustainable fabrics.

6. Government & Policy Influence: How can policymakers and businesses collaborate more effectively to drive sustainability initiatives and enforce environmental responsibility?

Governments should provide clear incentives, such as tax breaks for green investments and penalties for unsustainable practices. Businesses, in turn, should proactively engage in policy discussions, ensuring regulations are practical while still advancing sustainability goals. The EU Green Deal, which sets strict carbon neutrality targets, is an example of effective collaboration, pushing companies like Volkswagen to shift towards electric vehicle production.

7. Sustainable Product Design & Lifecycle Thinking: How important is life cycle assessment in product design, and what strategies should companies adopt to ensure true sustainability from production to disposal?

Life cycle assessments (LCA) help identify environmental impacts from raw material sourcing to disposal. Companies should design products with durability, recyclability, and modularity in mind—using fewer materials, biodegradable alternatives, and closed-loop recycling models to ensure full sustainability. Companies can adopt modular designs which allows users to replace individual components instead of discarding the entire device, this reducing e-waste.

8. Measuring Impact & Accountability: What are the most reliable frameworks or tools for measuring and reporting a company's ESG impact?

The **Global Reporting Initiative (GRI)**, **Task Force on Climate-related Financial Disclosures (TCFD)**, and **Sustainability Accounting Standards Board (SASB)** are widely adopted frameworks. Businesses should select tools based on industry needs while ensuring transparency in their ESG commitments. Microsoft uses SBTi-aligned targets to track and reduce its carbon footprint transparently.

9. Future of Sustainability & Green Innovation: What emerging trends or technologies do you see playing a crucial role in shaping the future of sustainability?

Green hydrogen, AI-driven resource optimisation, carbon capture, and next-generation biomaterials are key to future sustainability. The transition towards **regenerative business models**—where companies contribute positively to the environment—will redefine industry standards. Tesla's investment in battery recycling and various AI models help Google to reduce data centre energy consumption, showcasing the power of innovation.

10. Community & Consumer Engagement: How can businesses and organisations better engage communities and consumers to drive sustainable behaviour change?

In summary, transparency is key. Companies should use eco-labelling, sustainability certifications, and consumer education initiatives to empower individuals. Reward programs for recycling, partnerships with local NGOs, and interactive campaigns can help shape more sustainable consumption habits. There are many examples of popular brands that encourage consumers to return reusable packaging, while NGOs fight food waste by connecting consumers with surplus food from restaurants.



Hot Topics in Climate Action

Climate Finance: Bridging the Gap Between Commitments and Action

This topic explores how financial investments can drive meaningful climate action, focusing on green investments, carbon markets, corporate responsibility, and policy frameworks. It examines the challenges of funding climate solutions, ensuring equity in climate finance, and mobilizing resources for developing nations. The discussion will highlight innovative financing models, public-private partnerships, and the role of businesses in accelerating a sustainable future.

Dear Readers, You are requested to share your responses to the following.

Click the given link. <https://forms.gle/L1M2wq9iicizJxzX6>

Nature's Voice

Spotlight on Nature (Nature's Beauty on Mountains)

The majesty of mountains has long been a source of awe and inspiration for people around the world. The rugged peaks, serene valleys, and majestic landscapes of mountains embody the raw power and beauty of nature.

The Majesty of Mountains

Mountains are a testament to the incredible diversity and complexity of the natural world. From the snow-capped peaks of the Himalayas to the rolling hills of the Appalachian Mountains, each range has its own unique character and charm. The sheer scale of mountains is humbling, reminding us of our place in the world and the forces that shape our planet.

The Diversity of Mountain Ecosystems

Mountains are home to an incredible array of ecosystems, each with its own unique flora and fauna. From the alpine meadows of the Rockies to the tropical rainforests of the Andes, mountains support a staggering variety of plant and animal life. The adaptations of mountain plants and animals are a testament to the incredible resilience and diversity of life on Earth.



Contributed by - Ms Hina Mudgal

MYTH-BUSTING

Dear Readers: Sustainability is Expensive and Only for the Wealthy" What do you say?

<https://forms.gle/L1M2wq9iicizJxzX6>

The award-winning articles on Carbon footprint



Liba Mehreen

(Grade - 10)

Dubai Gem Private School

Human activities significantly impact the environment. Understanding carbon footprints, recycling, and green transportation helps reduce harm and combat climate change. A carbon footprint measures greenhouse gas emissions from daily activities like electricity use and travel. Switching to renewable energy, energy-efficient appliances, and conserving electricity can lower it.

Recycling minimizes waste by repurposing materials like plastic, glass, and paper, reducing landfill waste and conserving resources. Separating recyclables at home and supporting sustainable businesses make a difference.

Green transportation—walking, cycling, carpooling, or using electric vehicles—reduces pollution. Governments can enhance public transport and invest in bike lanes to promote eco-friendly travel.

Simple actions like reducing carbon footprints, recycling, and using green transportation collectively drive significant environmental change. (*Abridged by Dr. Pathasarathy*)



Cleyon Almeida

(Grade - 08)

School, Indian school wadi kabir

Carbon Footprint: Strategies for Achieving a Greener Tomorrow

Reducing our carbon footprint is essential for a sustainable future. A carbon footprint represents the total greenhouse gas emissions from individuals, organizations, and nations. Strategic actions at all levels can help mitigate climate change.

Individuals can lower their footprint by using energy-efficient appliances, public transport, reducing waste, and choosing eco-friendly products. Simple habits like conserving electricity, recycling, and adopting plant-based diets make a significant difference.

Corporations contribute by adopting green technologies, optimizing supply chains, and investing in renewable energy. Remote work, plastic reduction, and carbon-neutral policies further cut emissions.

Governments play a vital role by enforcing environmental regulations, promoting clean energy, and providing incentives for sustainability. Investments in public transport and carbon pricing can drive large-scale change.

Education and global collaboration are crucial to addressing climate challenges. Through collective efforts and innovative solutions, we can create a greener, more sustainable world. The time to act is now. (Abridged by Dr. Parthasarathy)



Global Climate Report

The latest global climate report highlights that 2024 was one of the warmest years on record, continuing a trend of accelerating global warming. Since the late 1970s, the Earth's temperature has increased by about 0.2°C per decade, with 2023 and 2024 standing out as exceptionally hot years. Several factors contributed to this warming, including a strong El Niño event, unprecedented sea surface temperature (SST) anomalies,

Extreme weather events were widespread in 2024, with record-breaking heatwaves, severe floods, and intense tropical storms. Flash floods impacted California, Persian Gulf countries, and eastern Spain, while monsoon rains led to large-scale flooding in South Asia and Australia. The year also saw a high number of tropical cyclones, with many causing significant damage across multiple continents.

Looking ahead, forecasts indicate that 2025 could be the second or third warmest year on record. There is also a growing likelihood that within the next five years, global temperatures will exceed the critical 1.5°C threshold set by the Paris Agreement.

All these seem to be coming true based on my personal experience in India. There has been extremely high temperatures based on the normals for February in my city in south India and even in Mumbai.

UPCOMING ECO EVENTS (March 2025)

– Poster making Competition. For college and school students

Poster-Making Competition Rules

Theme: The theme for the competition is "Fasting for a Greener Future: Nourishing the Planet, Sustaining Life!"

Size & Format: Posters must be in **A5 size**. Submissions can be either **handmade or digital**.

Originality: All posters must be **original** and created by the participant. No plagiarism or copyrighted material is allowed.

Submission: Send your poster to newsletteredufam@gmail.com in high resolution format (for digital posters) or a clear image (for handmade posters).

Deadline: The deadline for submission is **15th March 2025**. Late submissions will not be considered.

- CPD Teachers (3 Days): March 7–9 (Fri-Sun)
- CPD Principals (3 Days): March 14–16 (Fri-Sun)
- Corporate Training (3 Days): March 21–23 (Fri-Sun)
- Sustainability Sessions: Every Saturday, 4 PM UAE Time (March 1, 8, 15, 22, 29)
- Sustainability Competition: March 29 (Last Saturday of the month)
- Motivational Talk: March 31 (Monday)
- Weekly Podcast: Every Friday (March 7, 14, 21, 28)

We look forward to your creative contributions toward a sustainable future!



We wish " **GOOD LUCK** " to our proud delegates for the Global leaders conference on sustainability

12 April 2025 at Maldives

GLIMPSES OF FEB 2025



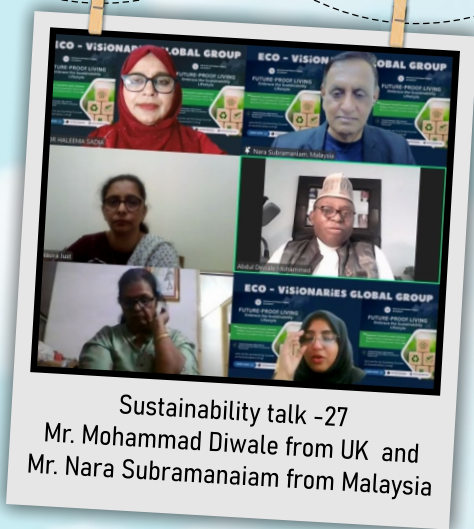
Sustainability talk 27 by Dr. Balakrishnan Ramanathan on SDG 9 industry innovation and infrastructure



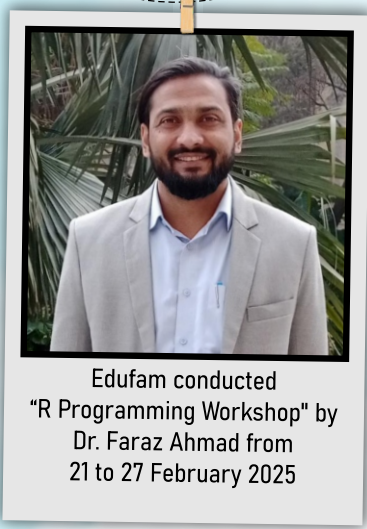
Dr. Haleema Sadia attended Born to win Workshop by Mr. Narendra Singh



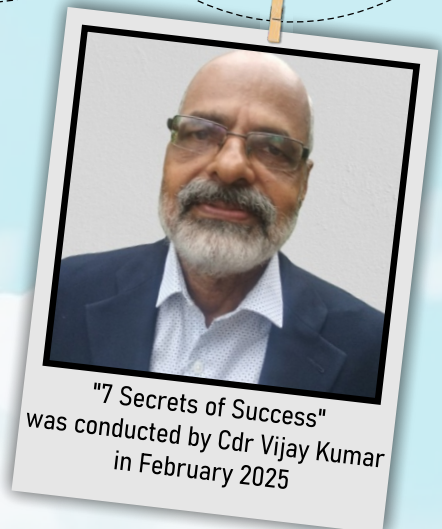
Dr. Haleema Sadia conducted the "youthful Me" workshop from 11 to 13 February 2025



Sustainability talk -27 Mr. Mohammad Diwale from UK and Mr. Nara Subramaniam from Malaysia



Edufam conducted "R Programming Workshop" by Dr. Faraz Ahmad from 21 to 27 February 2025



"7 Secrets of Success" was conducted by Cdr Vijay Kumar in February 2025

